

FIG. 1

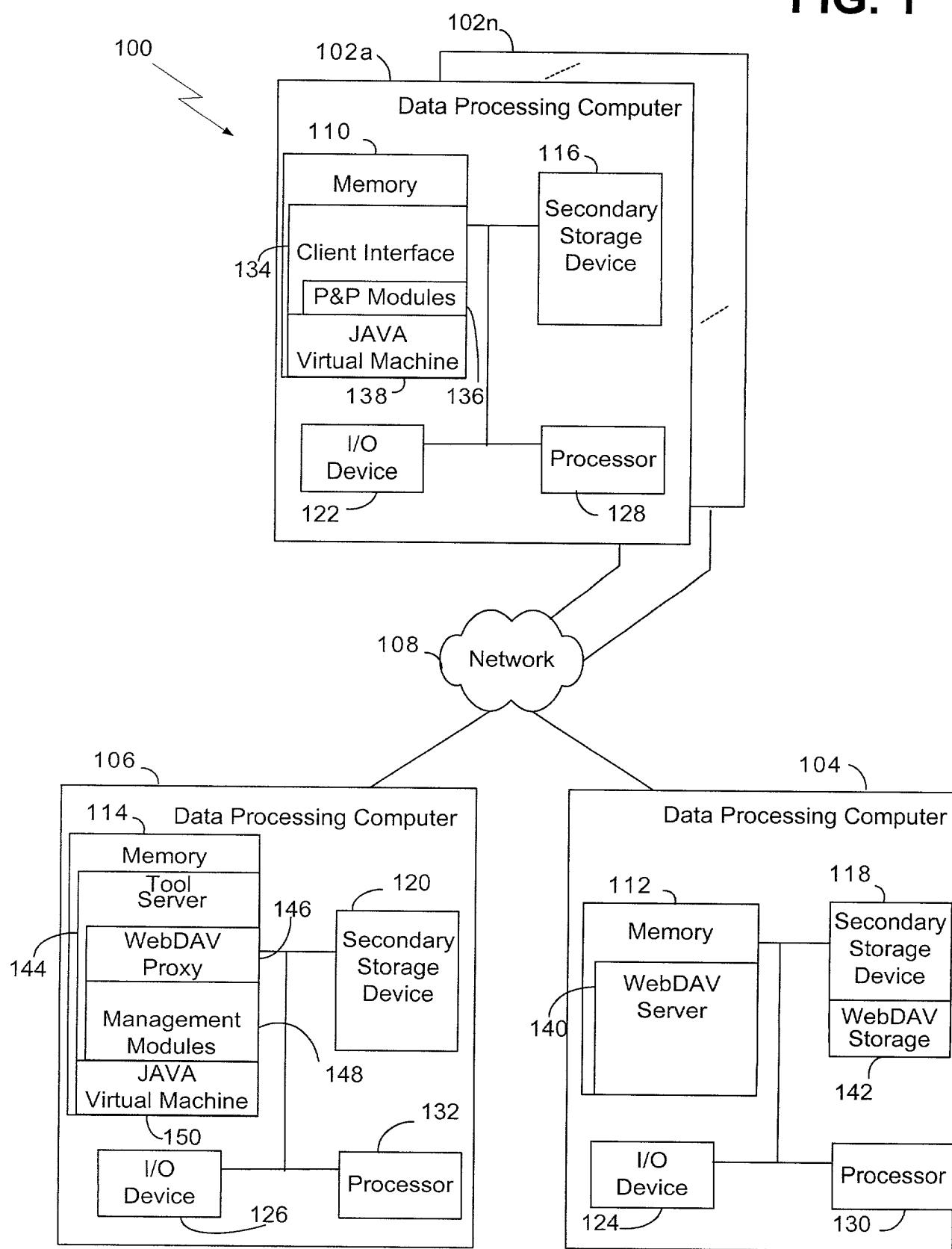


FIG. 2

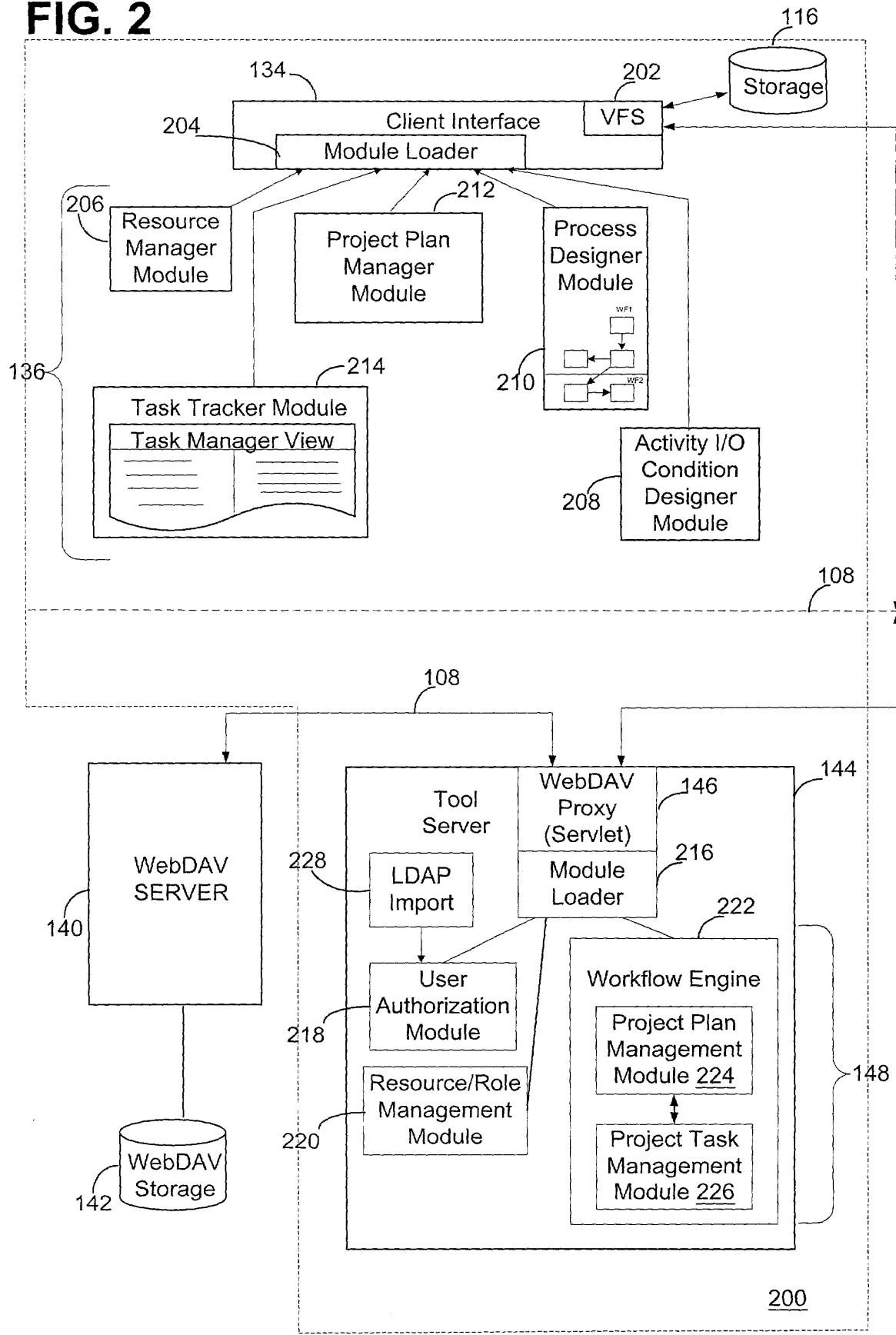


FIG. 3

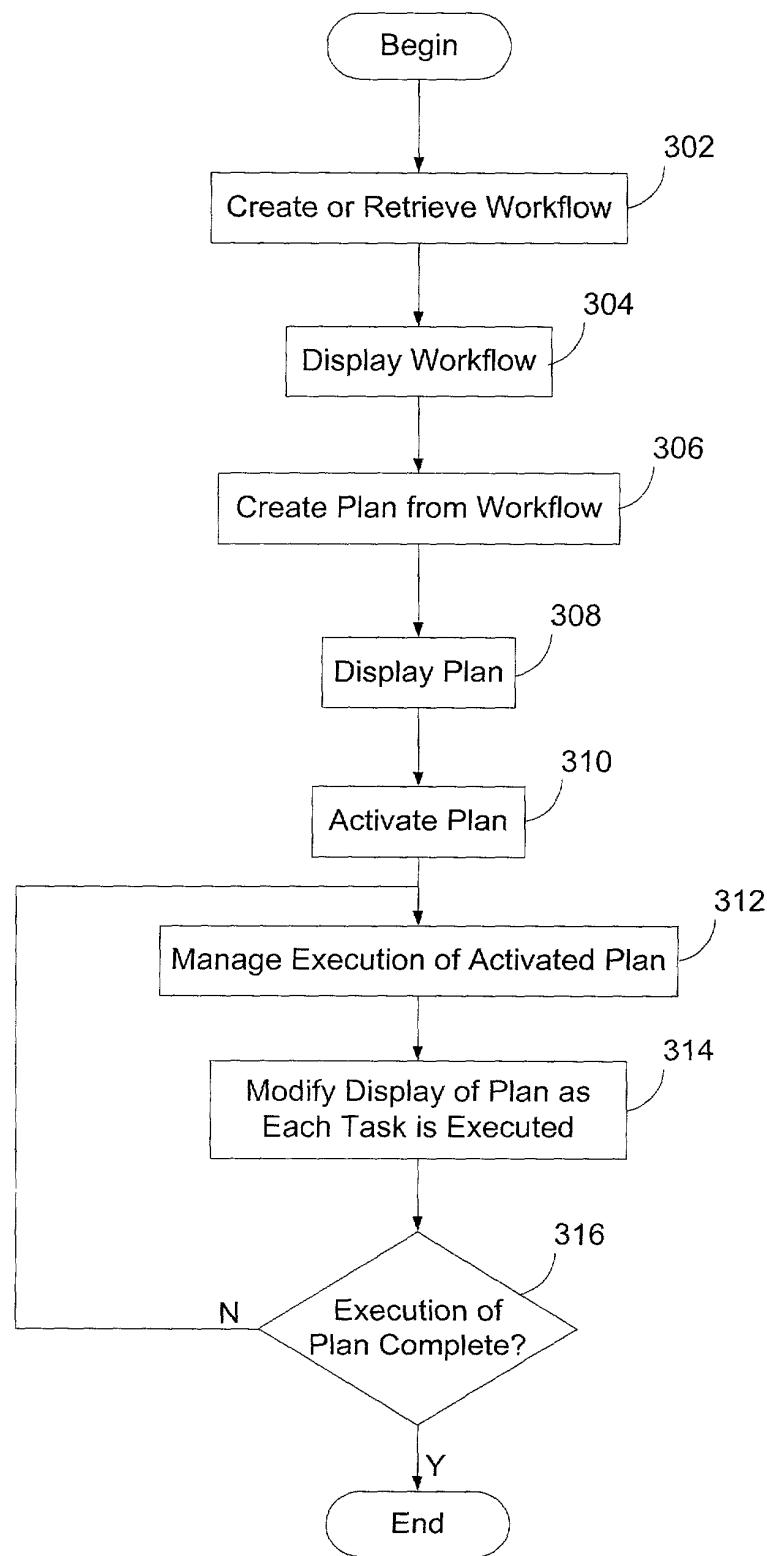


FIG. 4

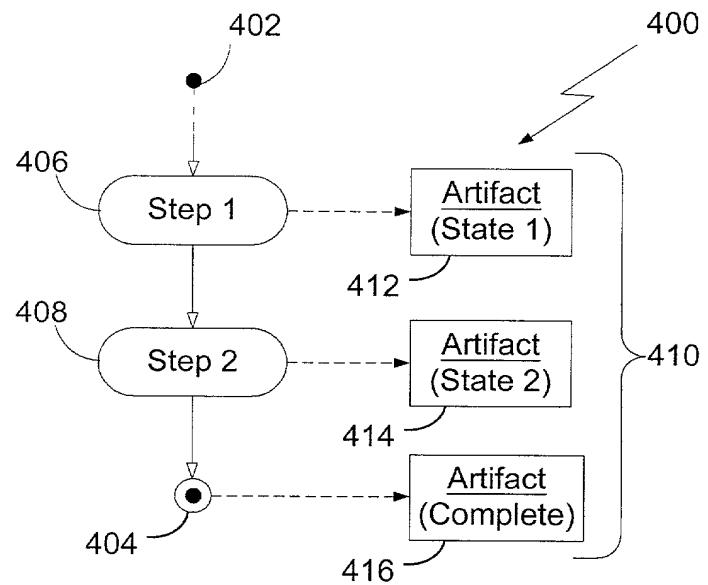


FIG. 5

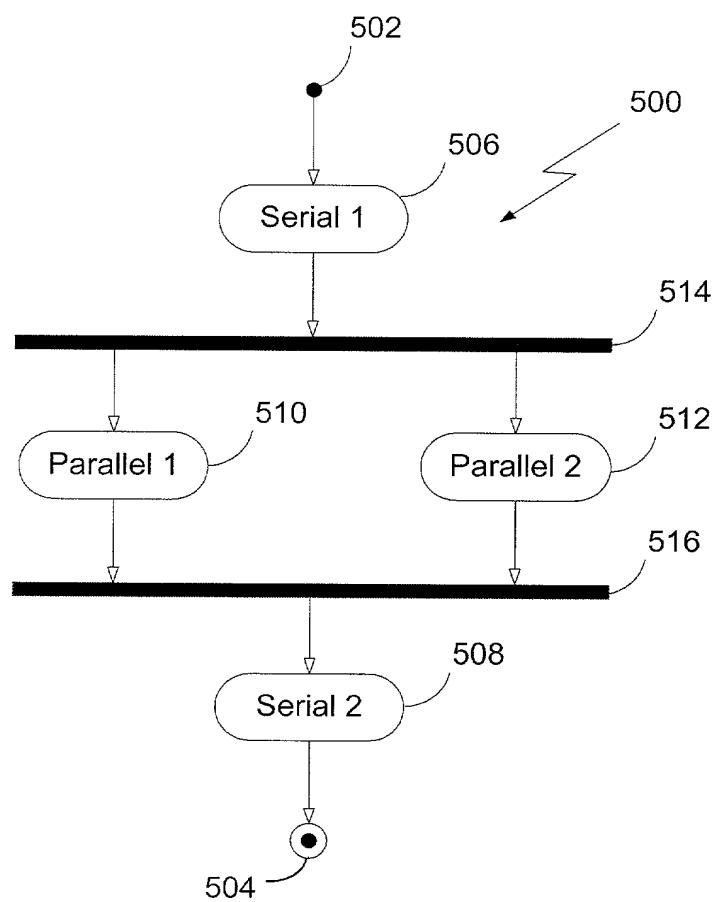


FIG. 6

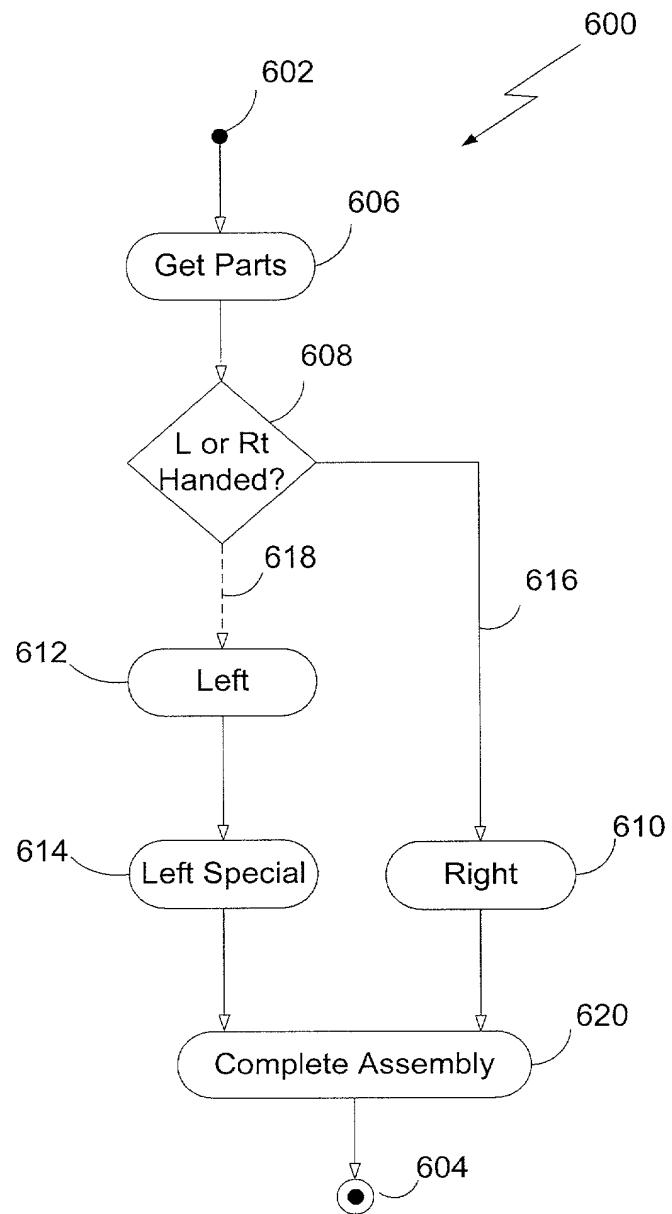


FIG. 7

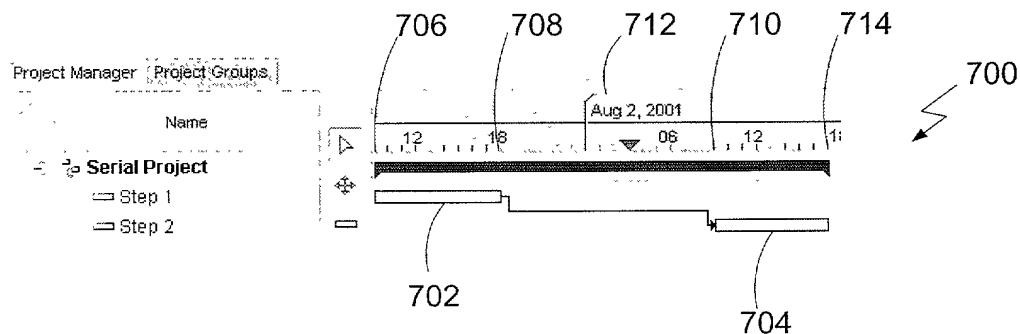


FIG. 8

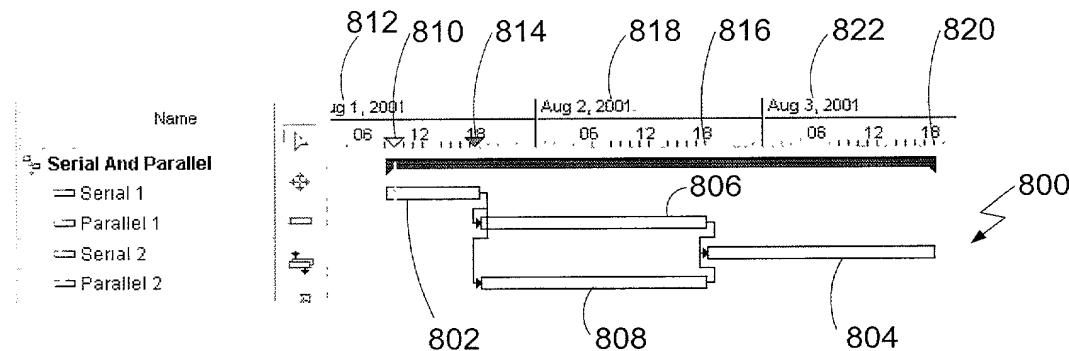


FIG. 9

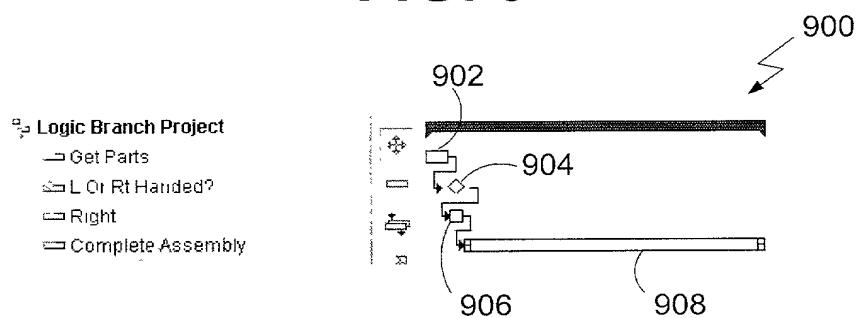


FIG. 10

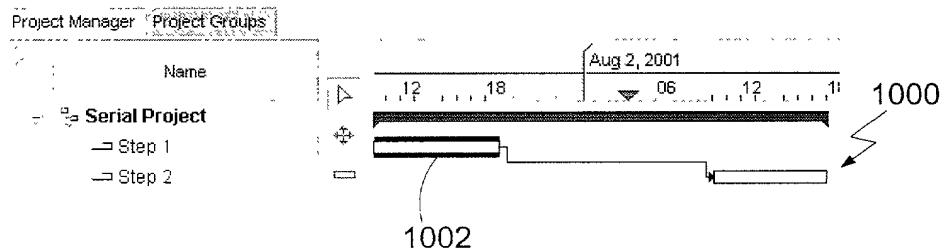


FIG. 11

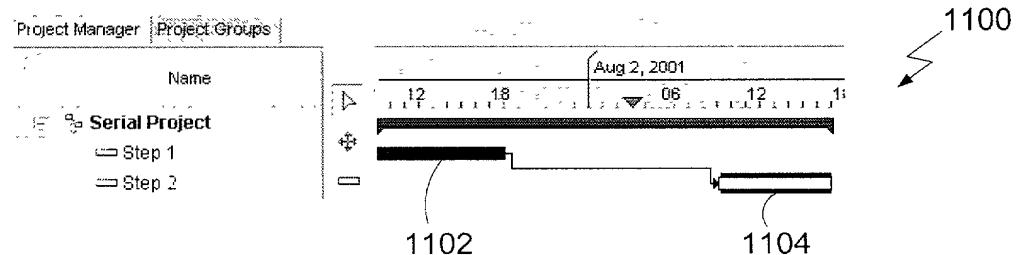


FIG. 12

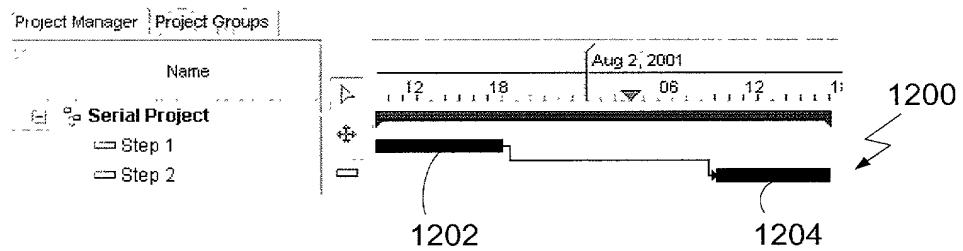


FIG. 13

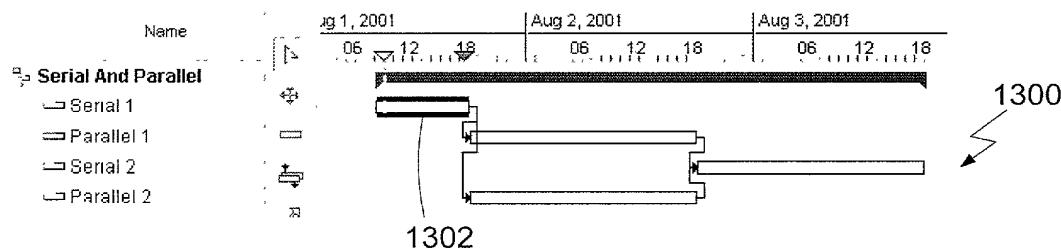


FIG. 14

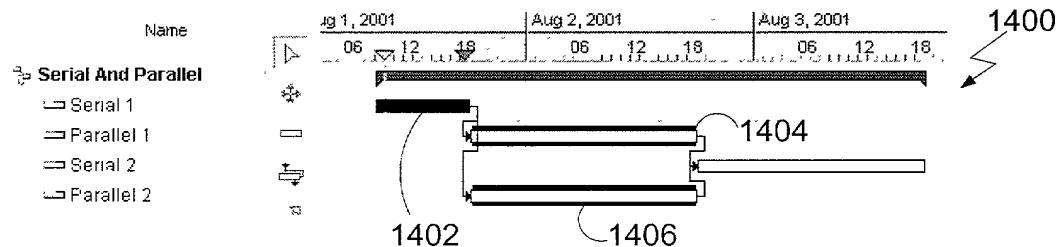


FIG. 15

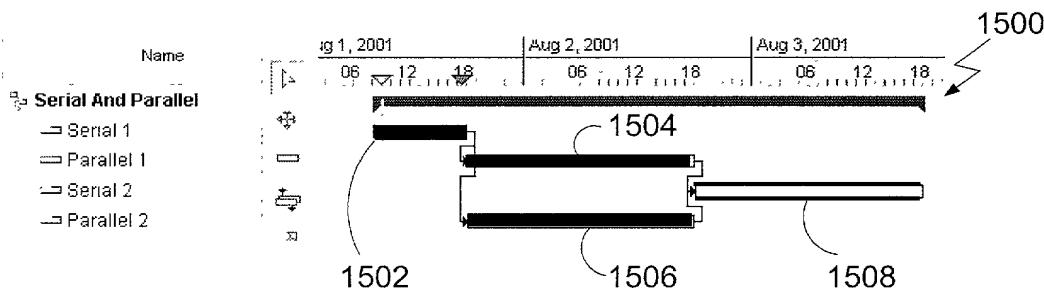


FIG. 16

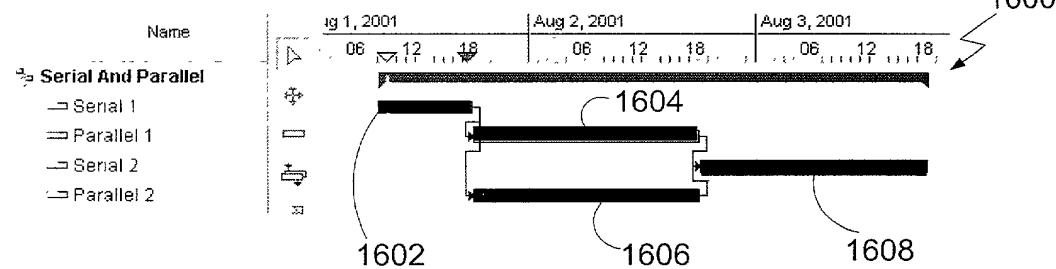
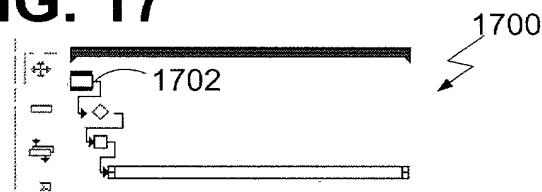


FIG. 17

Logic Branch Project

- Get Parts
- L Or Rt Handed?
- Right
- Complete Assembly

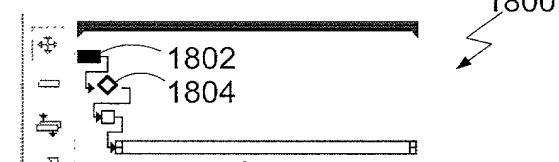


1700

FIG. 18

Logic Branch Project

- Get Parts
- L Or Rt Handed?
- Right
- Complete Assembly

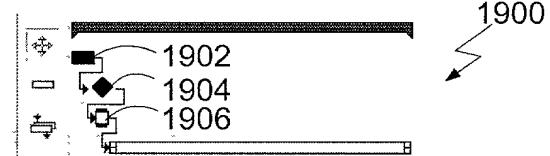


1800

FIG. 19

Logic Branch Project

- Get Parts
- L Or Rt Handed?
- Right
- Complete Assembly

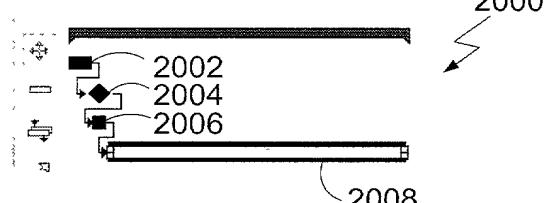


1900

FIG. 20

Logic Branch Project

- Get Parts
- L Or Rt Handed?
- Right
- Complete Assembly



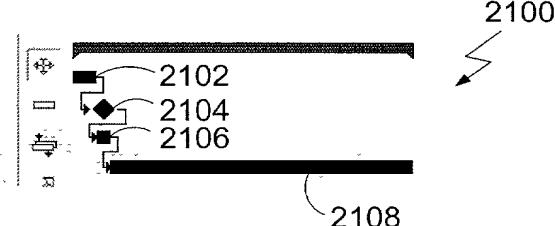
2000

2008

FIG. 21

Logic Branch Project

- Get Parts
- L Or Rt Handed?
- Right
- Complete Assembly



2100

2108

FIG. 22

- Logic Branch Project
 - Get Parts
 - L Or Rt Handed?
 - Right
 - Complete Assembly

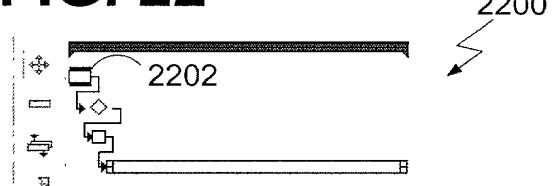


FIG. 23

- Logic Branch Project
 - Get Parts
 - L Or Rt Handed?
 - Right
 - Complete Assembly

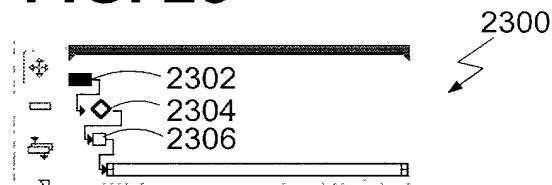


FIG. 24

- Logic Branch
 - Get Parts
 - L Or Rt Handed?
 - Left
 - Left Special
 - Complete Assembly

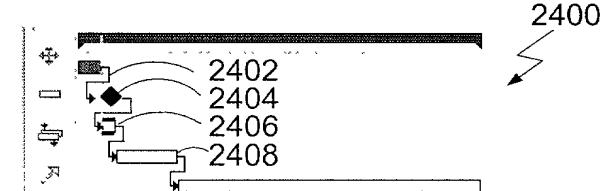


FIG. 25

Logic Branch

- Get Parts
- L Or Rt Handed?
- Left
- Left Special
- Complete Assembly

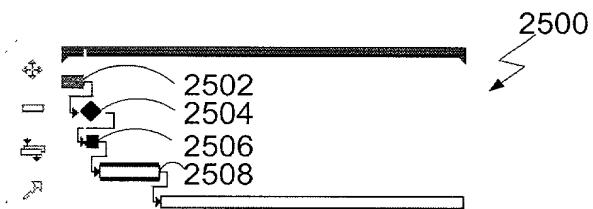


FIG. 26

Logic Branch

- Get Parts
- L Or Rt Handed?
- Left
- Left Special
- Complete Assembly

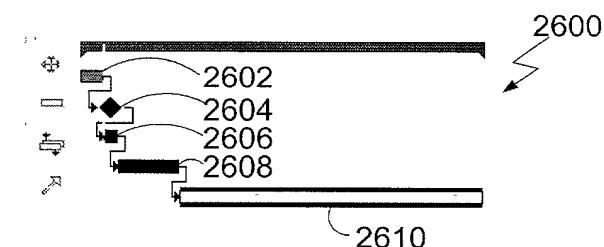


FIG. 27

Logic Branch

- Get Parts
- L Or Rt Handed?
- Left
- Left Special
- Complete Assembly

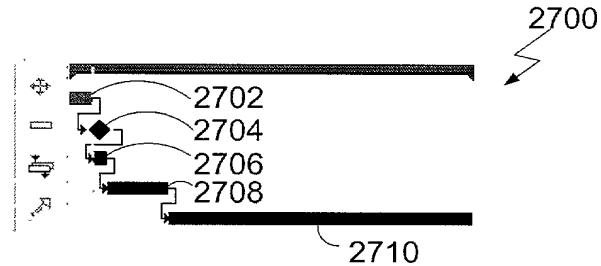


FIG. 28A

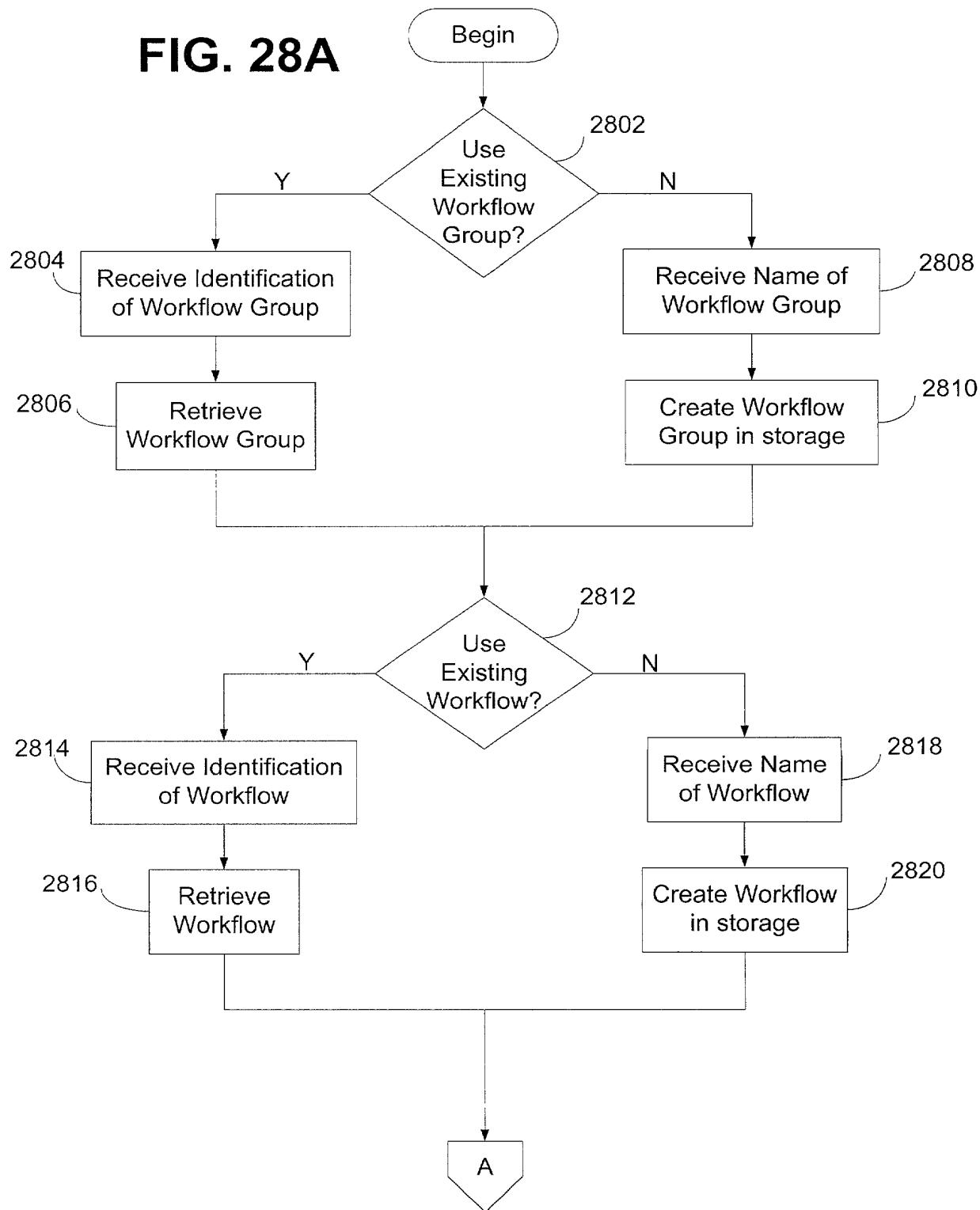


FIG. 28B

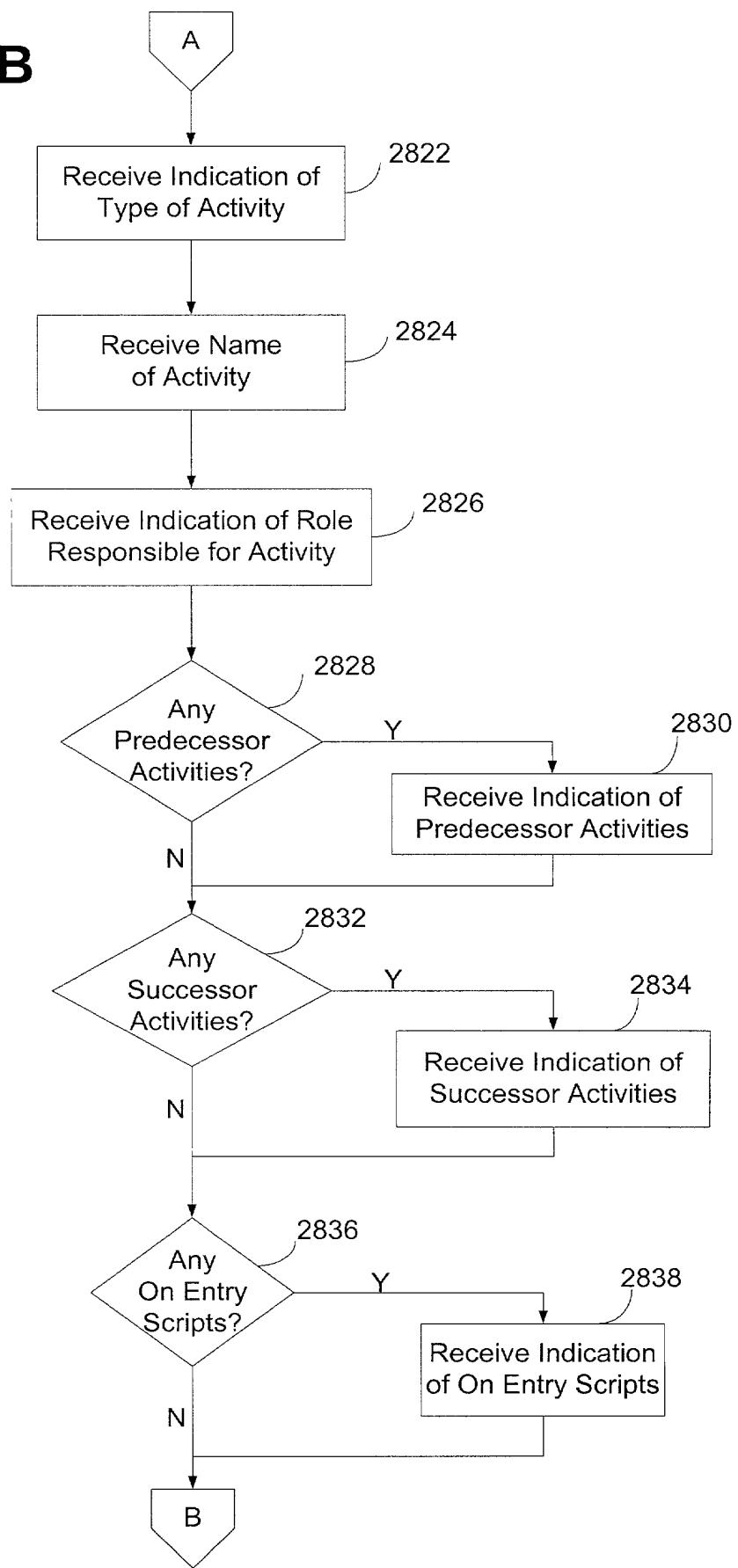


FIG. 28C

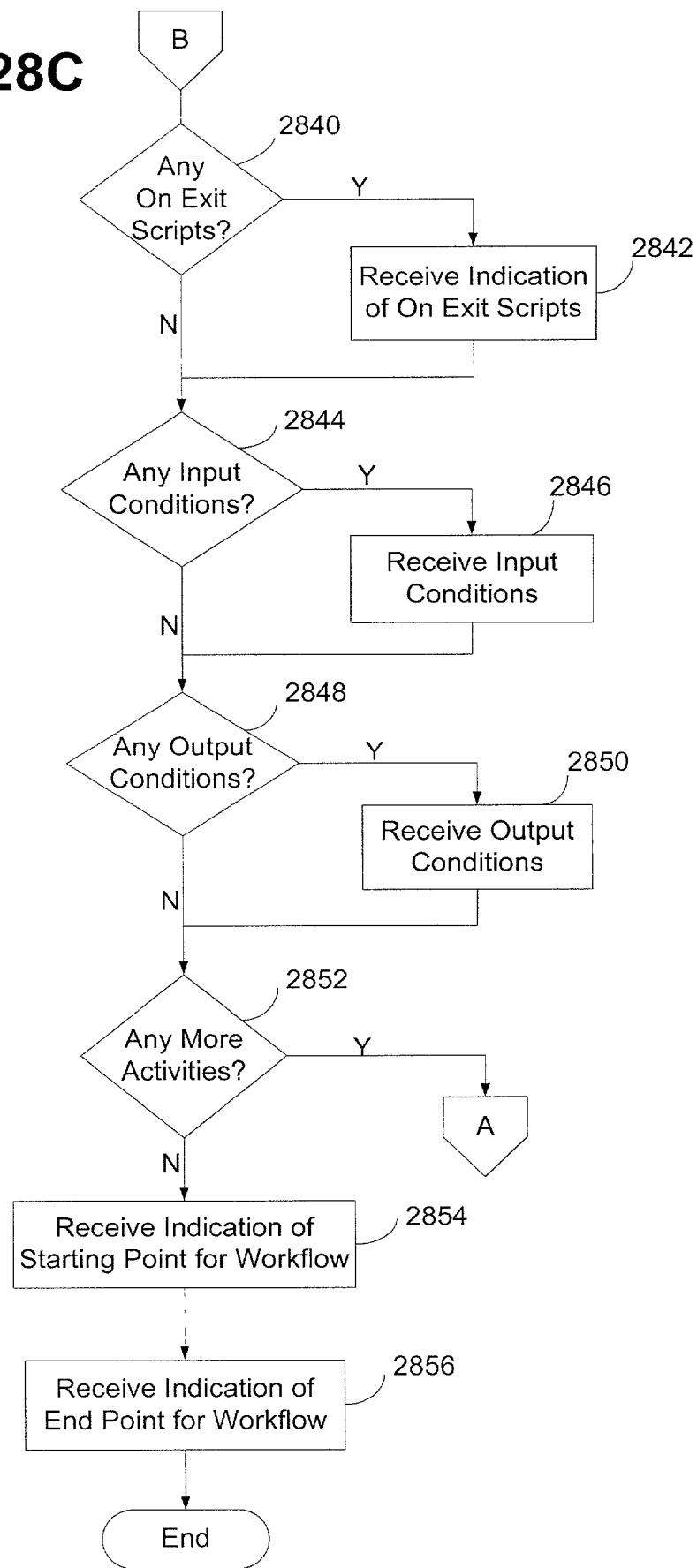


FIG. 29

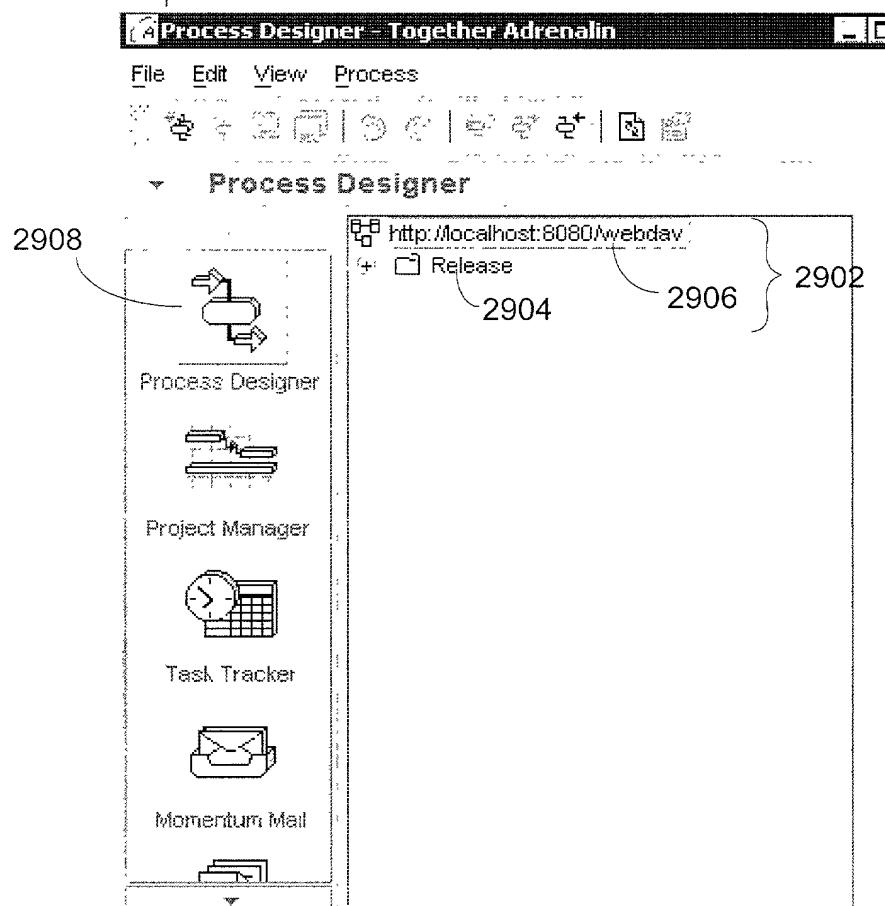


FIG. 30

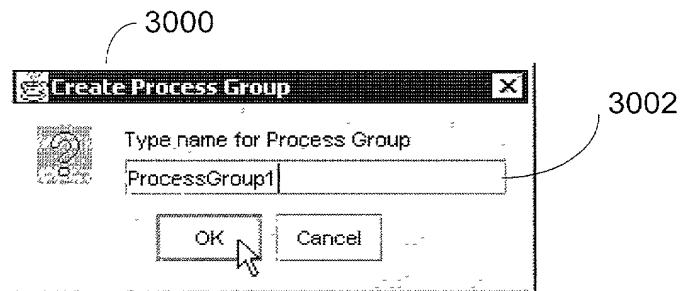


FIG. 31

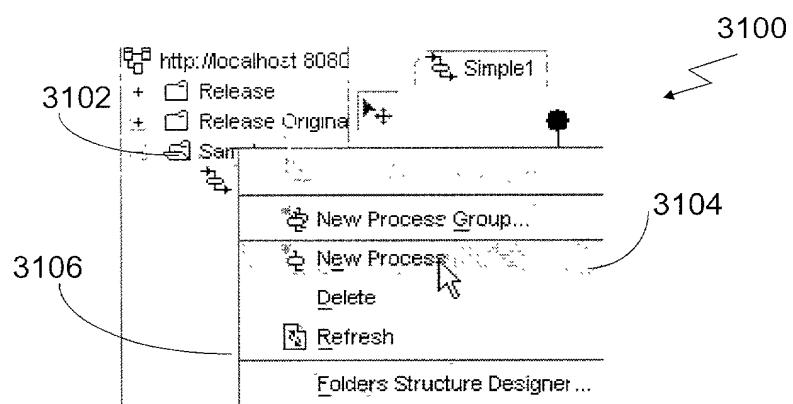


FIG. 32

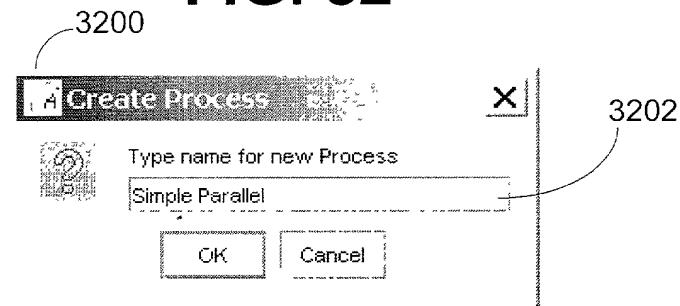


FIG. 33A

FIG. 33A

FIG. 33B

3394 {

- 3392 *<artifact id="1527" identity="linkable1" name="Document is INITIAL">*
<description>The condition becomes true when the %Document% artifact gets the INITIAL state. To make this condition valid you should define the %Document% parameter and optionally define the document template and the application to open the document.</description>
<type>linkable</type>
<link link="%Document%" />
<state>INITIAL</state> 3393
<event id="1528" />
- 3395 *</artifact>*
- 3396 *<artifact id="1529" identity="linkable1" name="Document is LEFT">*
<description>The condition becomes true when the %Document% artifact gets the LEFT state. To make this condition valid you should define the %Document% parameter and optionally define the document template and the application to open the document.</description>
<type>linkable</type>
<link link="%Document%" />
<state>LEFT</state>
<event id="1530" />
- 3397 *</artifact>*
- 3398 *<artifact id="1531" identity="linkable1" name="Document is LEFT SPECIAL">*
<description>The condition becomes true when the %Document% artifact gets the LEFT SPECIAL state. To make this condition valid you should define the %Document% parameter and optionally define the document template and the application to open the document.</description>
<type>linkable</type>
<link link="%Document%" />
<state>LEFT SPECIAL</state>
<event id="1532" />
- 3399 *</artifact>*
- 3390 *<artifact id="1533" identity="linkable1" name="Document is RIGHT">*
<description>The condition becomes true when the %Document% artifact gets the RIGHT state. To make this condition valid you should define the %Document% parameter and optionally define the document template and the application to open the document.</description>
<type>linkable</type>
<link link="%Document%" />
<state>RIGHT</state> 3398
<event id="1534" />
- 3391 *</artifact>*
- 3392 *<artifact id="1535" identity="linkable1" name="Document is APPROVED">*
<description>The condition becomes true when the %Document% artifact gets the APPROVED state. To make this condition valid you should define the %Document% parameter and optionally define the document template and the application to open the document.</description>
<type>linkable</type>
<link link="%Document%" />
<state>APPROVED</state>
<event id="1536" />
- 3393 *</artifact>*

FIG. 33C

```

3308 } - <logic id="1522" name="L or Rt Handed?" responsiblerole="Assembler">
3308 }   <description /> 3324
3308 }   - <script>
3308 }     - <![CDATA[
3308 }       approved()
3308 }     ]]>
3308 }   </script>
3308 }   <predecessors_id id="10" /> 3368
3308 }   <other_path_id id="1525" /> 3370
3308 }   <other_path_id id="1523" /> 3374
3308 }   <defpath_id id="1525" /> 3378
3308 } </logic>
3318 } - <syncbar id="11"> 3362
3318 }   <description />
3318 }   <startBar>T</startBar>
3318 }   <successors_id id="10" />
3318 } </syncbar>
3320 } - <syncbar id="12">
3320 }   <description />
3320 }   <endBar>T</endBar>
3320 }   <predecessors_id id="1526" />
3320 } </syncbar>
3320 } - <event id="1528" name="??Event_name">
3320 }   <description>??Event_desc</description>
3320 }   <type>REQUEST-GUARD</type>
3320 }   <request>PROPPATCH</request>
3320 } </event>
3320 } - <event id="1530" name="??Event_name">
3320 }   <description>??Event_desc</description>
3320 }   <type>REQUEST-GUARD</type>
3320 }   <request>PROPPATCH</request>
3320 } </event>
3320 } - <event id="1532" name="??Event_name">
3320 }   <description>??Event_desc</description>
3320 }   <type>REQUEST-GUARD</type>
3320 }   <request>PROPPATCH</request>
3320 } </event>
3320 } - <event id="1534" name="??Event_name">
3320 }   <description>??Event_desc</description>
3320 }   <type>REQUEST-GUARD</type>
3320 }   <request>PROPPATCH</request>
3320 } </event>
3320 } <event id="1536" name="??Event_name">
3320 }   <description>??Event_desc</description>
3320 }   <type>REQUEST-GUARD</type>
3320 }   <request>PROPPATCH</request>
3320 } </event>
3320 } </process>

```

FIG. 34

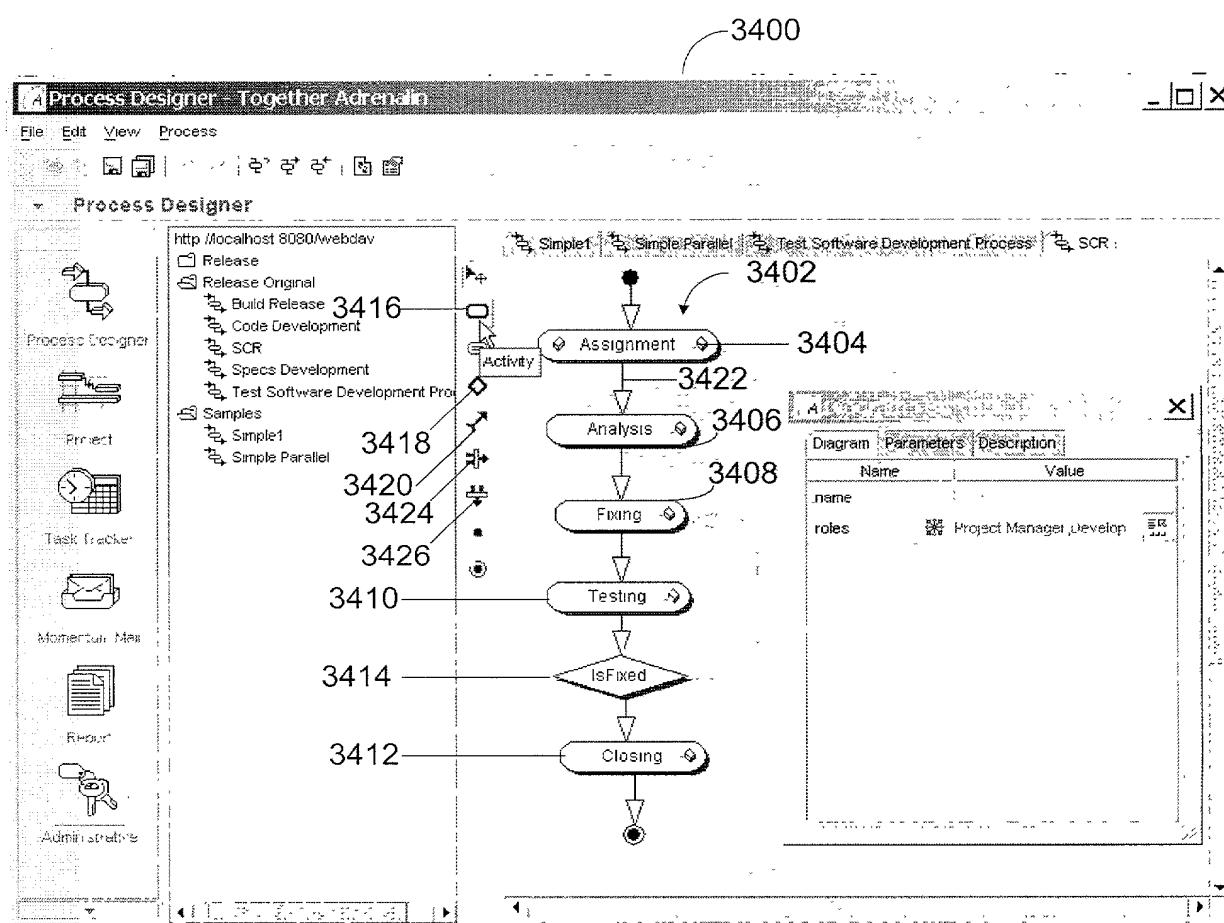


FIG. 35

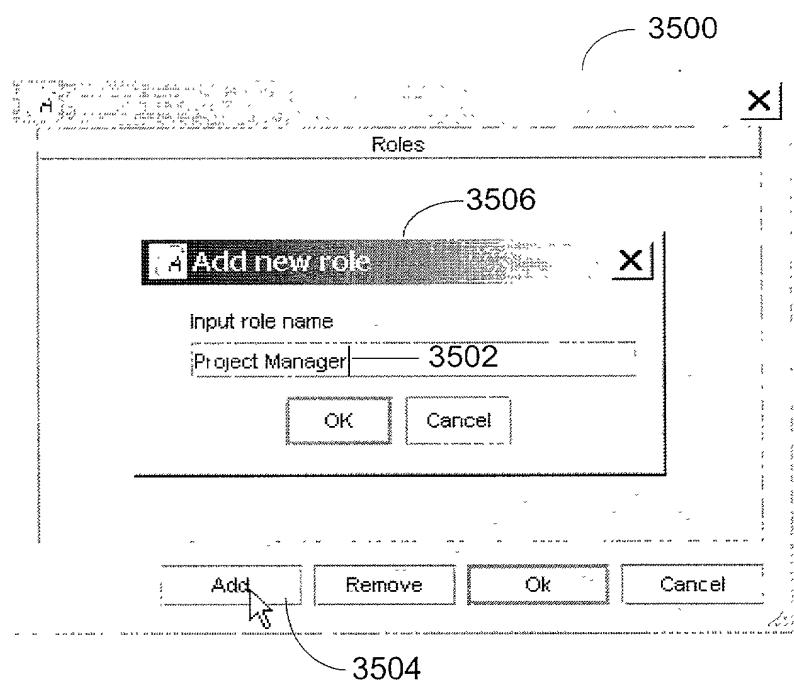


FIG. 36

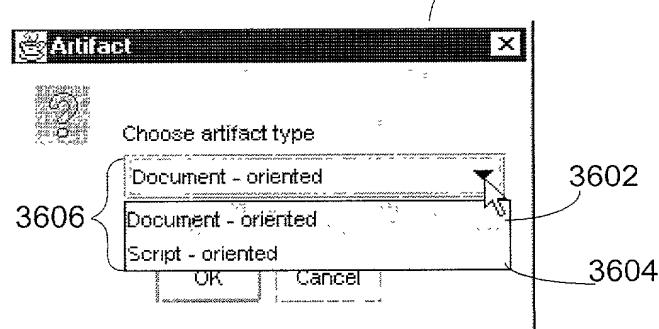


FIG. 37

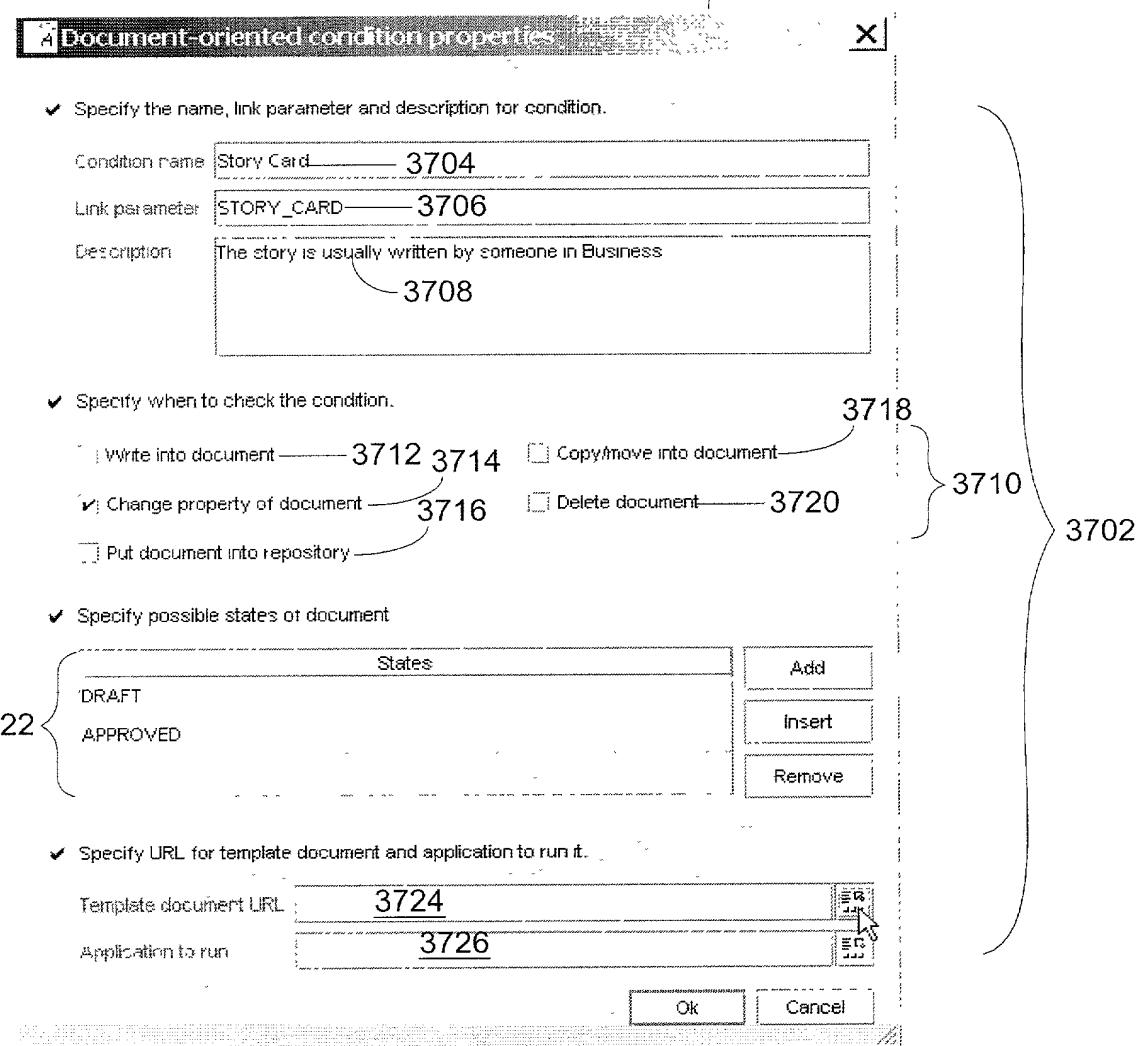


FIG. 38

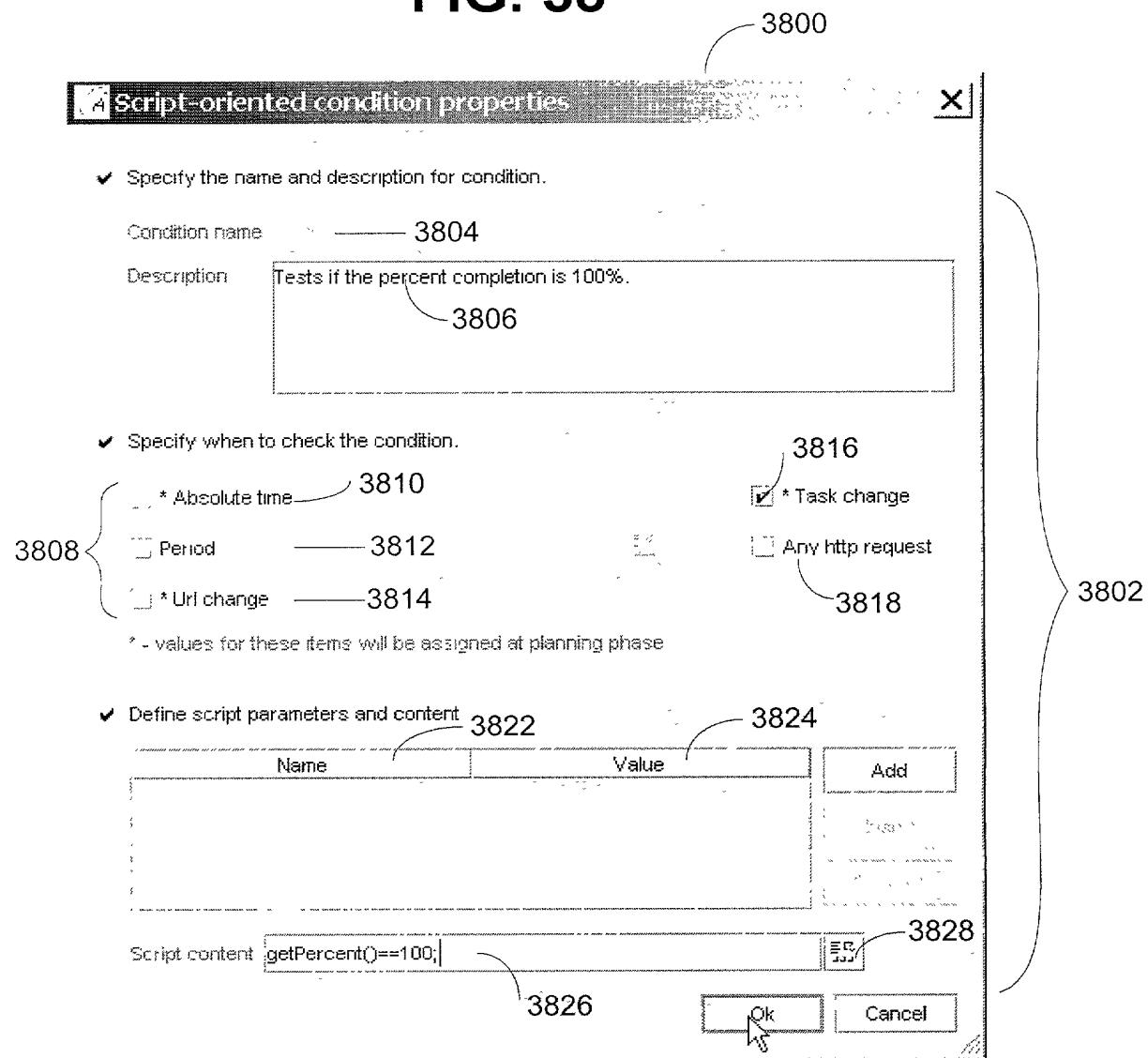
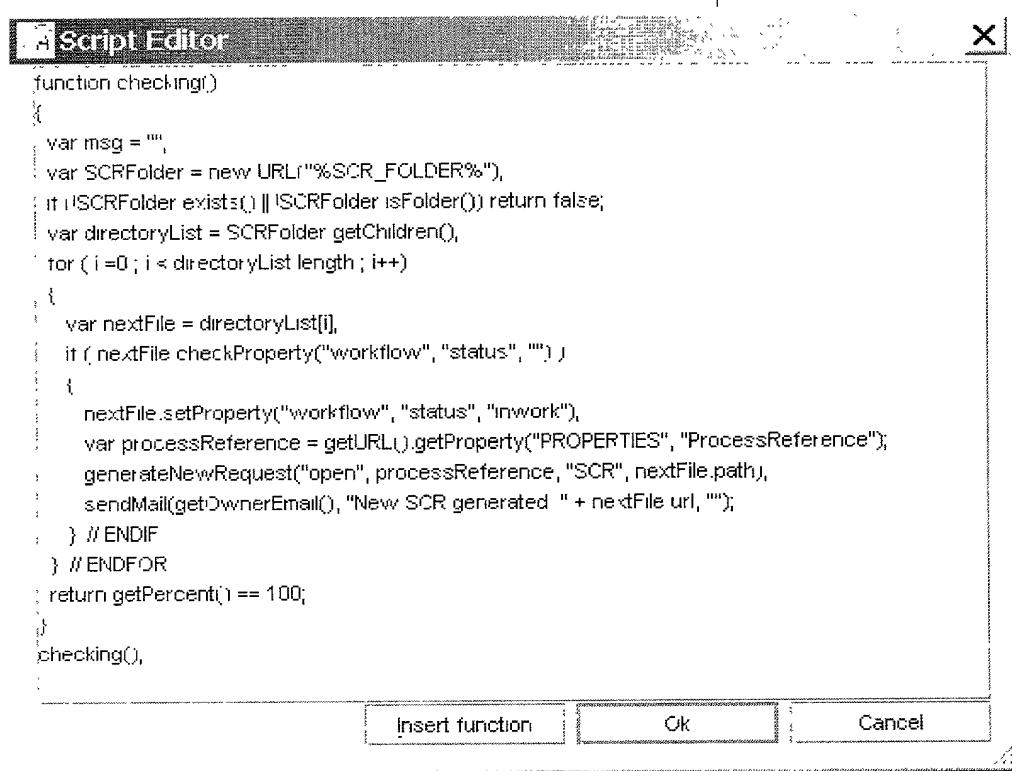


FIG. 39

3900



0010 0012 0014 0016 0018 0020 0022 0024 0026 0028 0030 0032 0034 0036 0038 0040 0042 0044 0046 0048 0050 0052 0054 0056 0058 0060 0062 0064 0066 0068 0070 0072 0074 0076 0078 0080 0082 0084 0086 0088 0090 0092 0094 0096 0098 0100

FIG. 40

4000

Name	Value	
name	Specs Development	4002
duration	1	4004
duration format	units	4006
responsible role	Project Manager	4008
onEntry script	sendMail(getOwnerEmail(), getProject	4010
onExit script		
subprocess URL	processGroup1/Specs_Development.xml	4012

FIG. 41A

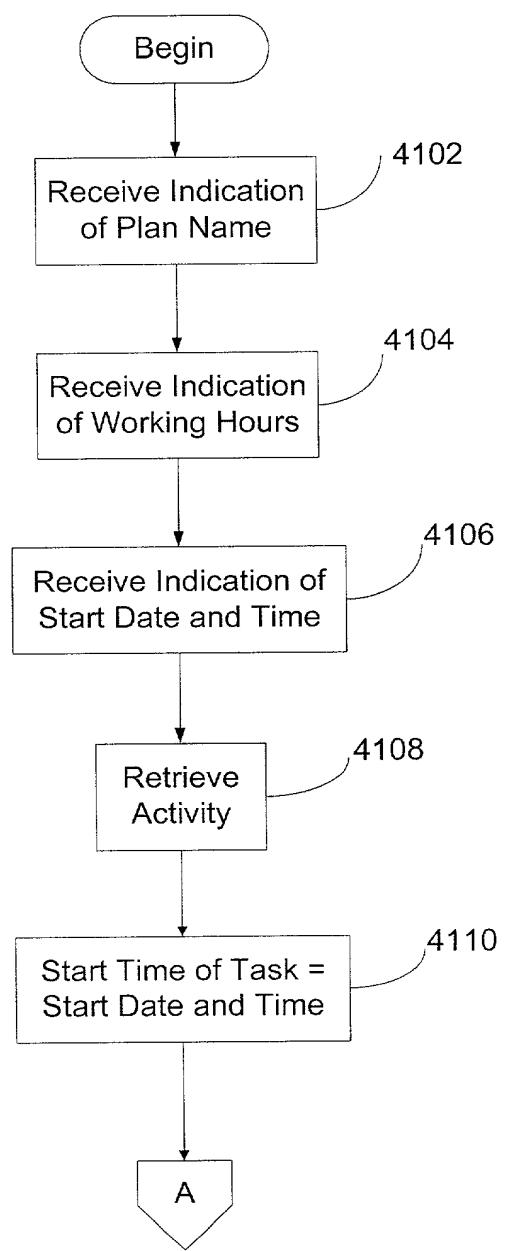


FIG. 41B

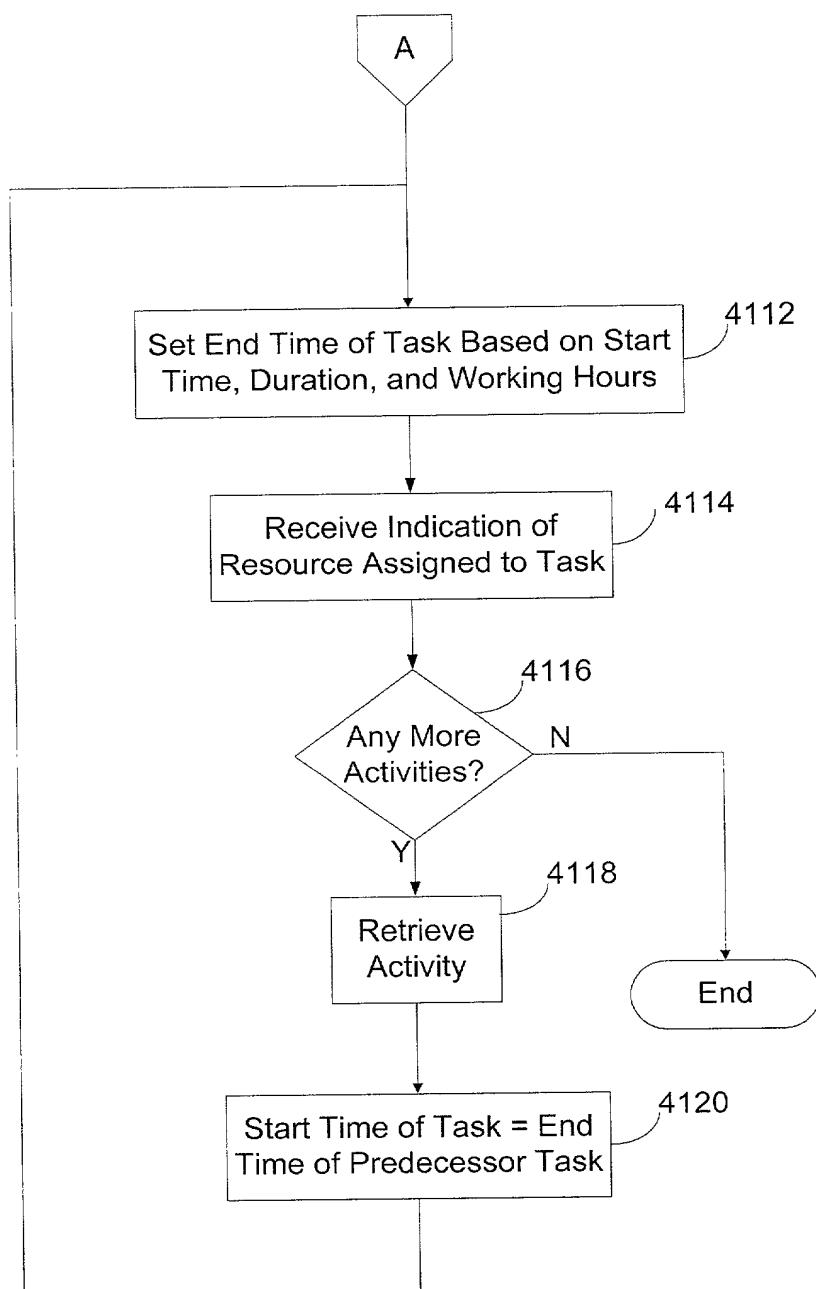


FIG. 42

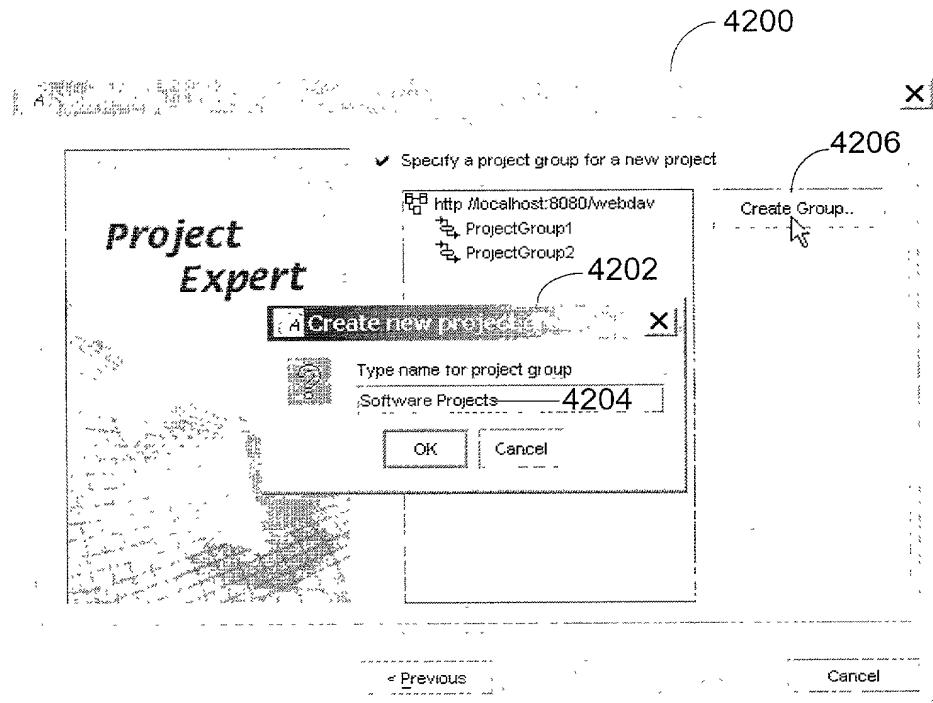


FIG. 43

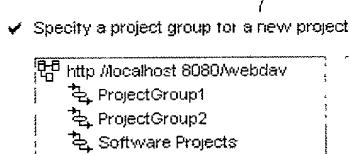


FIG. 44

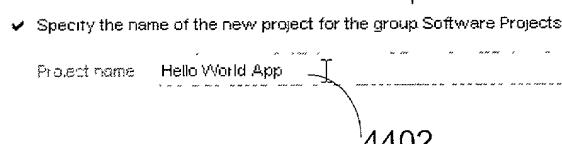


FIG. 45

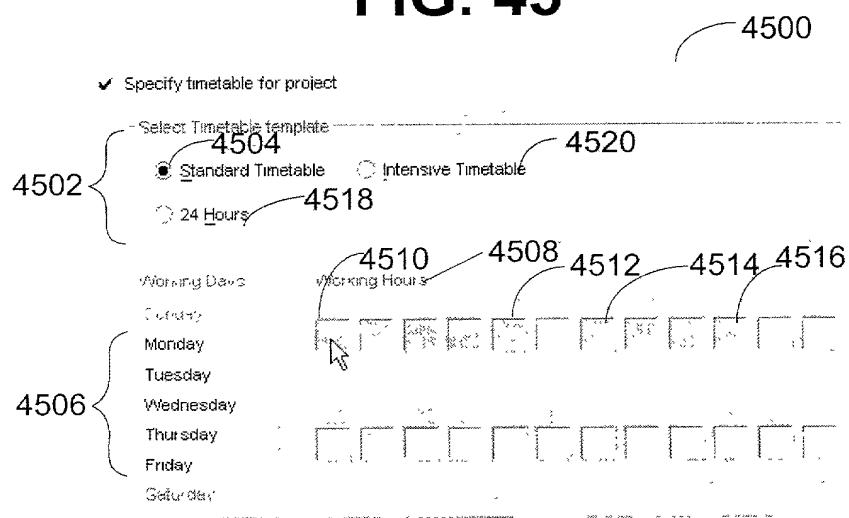
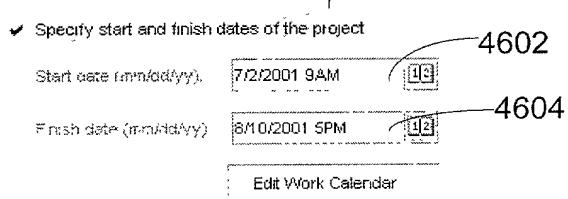


FIG. 46



4700



FIG. 47

```

<?xml version="1.0" encoding="UTF-8" ?>
<process group="" name="Serial & Parallel">
  <description />
  <role name="Worker" />
  - <activity id="10" name="Serial 1" responsibleRole="Worker">
    <description />
    <defduration units="hours" value="9" /> 4704
    <predecessors_id id="11" />
    <successors_id id="1522" />
  </activity>
  - <activity id="1523" name="Parallel 1" responsibleRole="Worker">
    <description />
    <defduration units="hours" value="24" /> 4710
    <predecessors_id id="1522" />
    <successors_id id="1525" />
  </activity>
  - <activity id="1524" name="Parallel 2" responsibleRole="Worker">
    <description />
    <defduration units="hours" value="24" /> 4712
    <predecessors_id id="1522" />
    <successors_id id="1525" />
  </activity>
  - <activity id="1526" name="Serial 2" responsibleRole="Worker">
    <description />
    <defduration units="hours" value="24" /> 4716
    <predecessors_id id="1525" />
    <successors_id id="12" />
  </activity>
  - <syncbar id="11">
    <description />
    <startBar>T</startBar>
    <successors_id id="10" />
  </syncbar>
  - <syncbar id="12">
    <description />
    <endBar>T</endBar>
    <predecessors_id id="1526" />
  </syncbar>
  - <syncbar id="1522" name="SyncBarH1">
    <description />
    <predecessors_id id="10" />
    <successors_id id="1523" />
    <successors_id id="1524" />
  </syncbar>
  <syncbar id="1525" name="SyncBarH2">
    <description />
    <predecessors_id id="1523" />
    <predecessors_id id="1524" />
    <successors_id id="1526" />
  </syncbar>
</process>

```

FIG. 48

```
<?xml version="1.0" encoding="UTF-8" ?>
<A:plan name="Serial_And_Parallel" userid="JK" xmlns:A="workflow">
  - <A:description>
    - <![CDATA[
      No Description
    ]]>
  </A:description>
  - <A:task activityID="10" caption="Serial 1"
    link="Sample_Project_Plans/Serial_And_Parallel/Task_2.xml" name="Task_2"
    owner="Worker"
    processURL="http://localhost:8080/webdav/ProcessGroup2/Process1.xml"
    type="general" userid="JK">
    <A:start>2001 8 1 9</A:start> 4804
    <A:finish>2001 8 1 18</A:finish> 4806
    <A:supertask name="Task_1" />
    <A:user>JK</A:user>
    <A:successor name="Task_3" />
    <A:successor name="Task_4" />
  </A:task>
  - <A:task activityID="1523" caption="Parallel 1"
    link="Sample_Project_Plans/Serial_And_Parallel/Task_3.xml" name="Task_3"
    owner="Worker"
    processURL="http://localhost:8080/webdav/ProcessGroup2/Process1.xml"
    type="general" userid="JK">
    <A:start>2001 8 1 18</A:start> 4812
    <A:finish>2001 8 2 18</A:finish> 4816
    <A:supertask name="Task_1" />
    <A:user>JK</A:user>
    <A:predecessor name="Task_2" />
    <A:successor name="Task_5" />
  </A:task>
  - <A:task activityID="1524" caption="Parallel 2"
    link="Sample_Project_Plans/Serial_And_Parallel/Task_4.xml" name="Task_4"
    owner="Worker"
    processURL="http://localhost:8080/webdav/ProcessGroup2/Process1.xml"
    type="general" userid="JK">
    <A:start>2001 8 1 18</A:start> 4814
    <A:finish>2001 8 2 18</A:finish> 4818
    <A:supertask name="Task_1" />
    <A:user>JK</A:user>
    <A:predecessor name="Task_2" />
    <A:successor name="Task_5" />
  </A:task>
  - <A:task activityID="1526" caption="Serial 2"
    link="Sample_Project_Plans/Serial_And_Parallel/Task_5.xml" name="Task_5"
    owner="Worker"
    processURL="http://localhost:8080/webdav/ProcessGroup2/Process1.xml"
    type="general" userid="JK">
    <A:start>2001 8 2 18</A:start> 4822
    <A:finish>2001 8 3 18</A:finish> 4824
    <A:supertask name="Task_1" />
    <A:user>JK</A:user>
    <A:predecessor name="Task_3" />
    <A:predecessor name="Task_4" />
  </A:task>
  - <A:task activityID="NONE" caption="Serial And Parallel"
    link="Sample_Project_Plans/Serial_And_Parallel/Task_1.xml" name="Task_1"
    processURL="http://localhost:8080/webdav/ProcessGroup2/Process1.xml"
    type="general" userid="JK">
    <A:start>2001 8 1 8</A:start>
    <A:finish>2001 8 3 18</A:finish>
    <A:user>JK</A:user>
    <A:subtask name="Task_2" />
```

FIG. 49

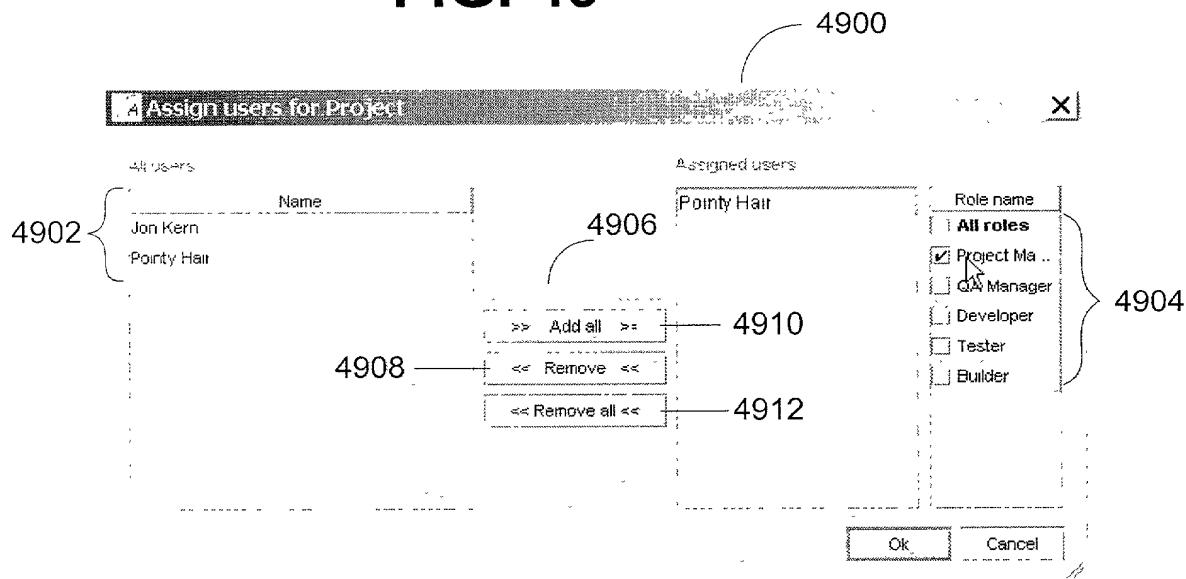


FIG. 50

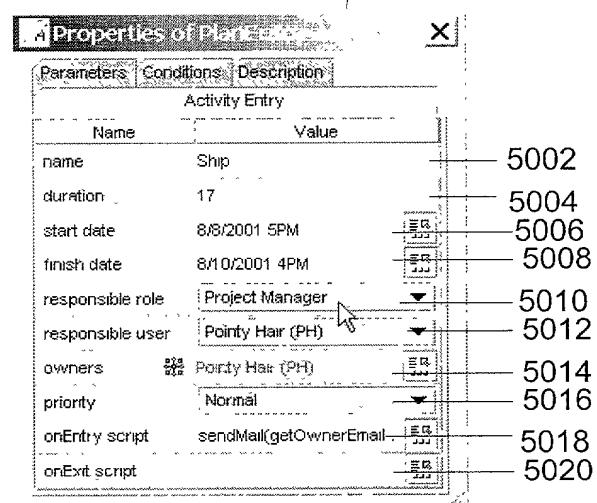


FIG. 51

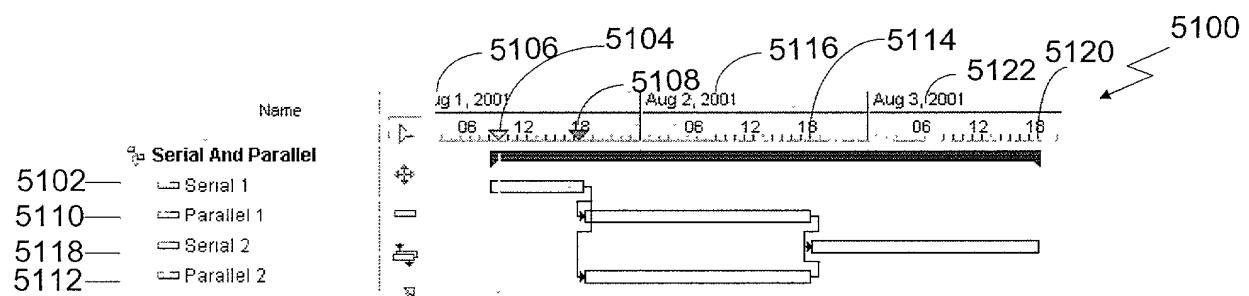


FIG. 52

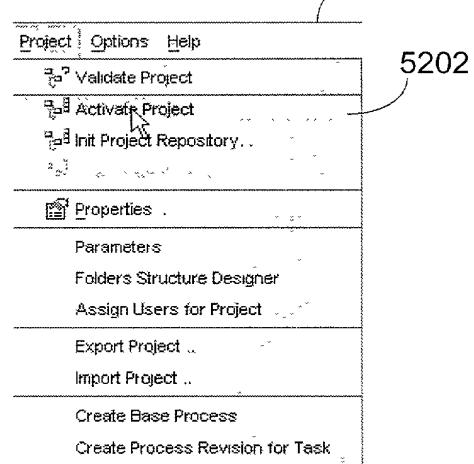


FIG. 53

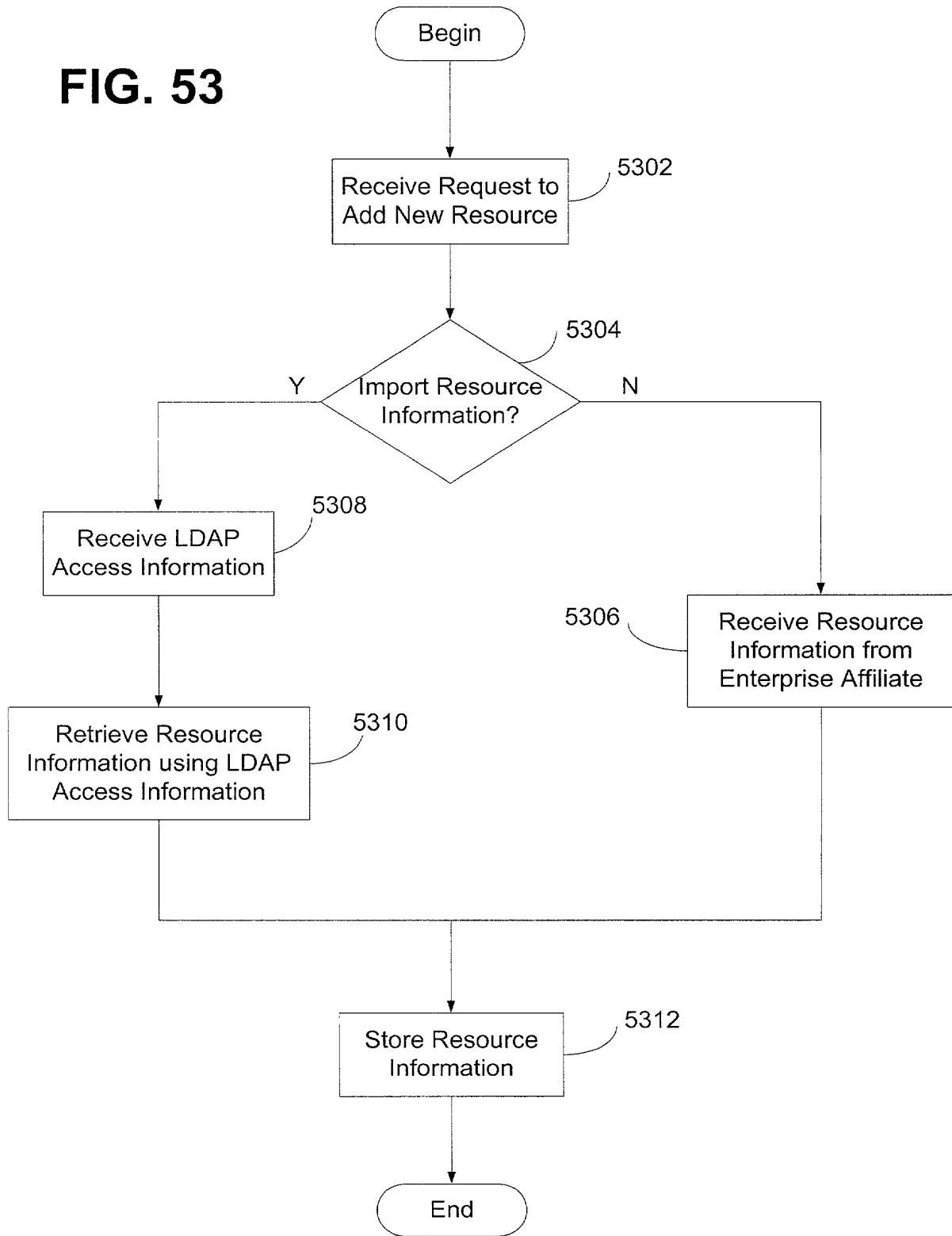


FIG. 54

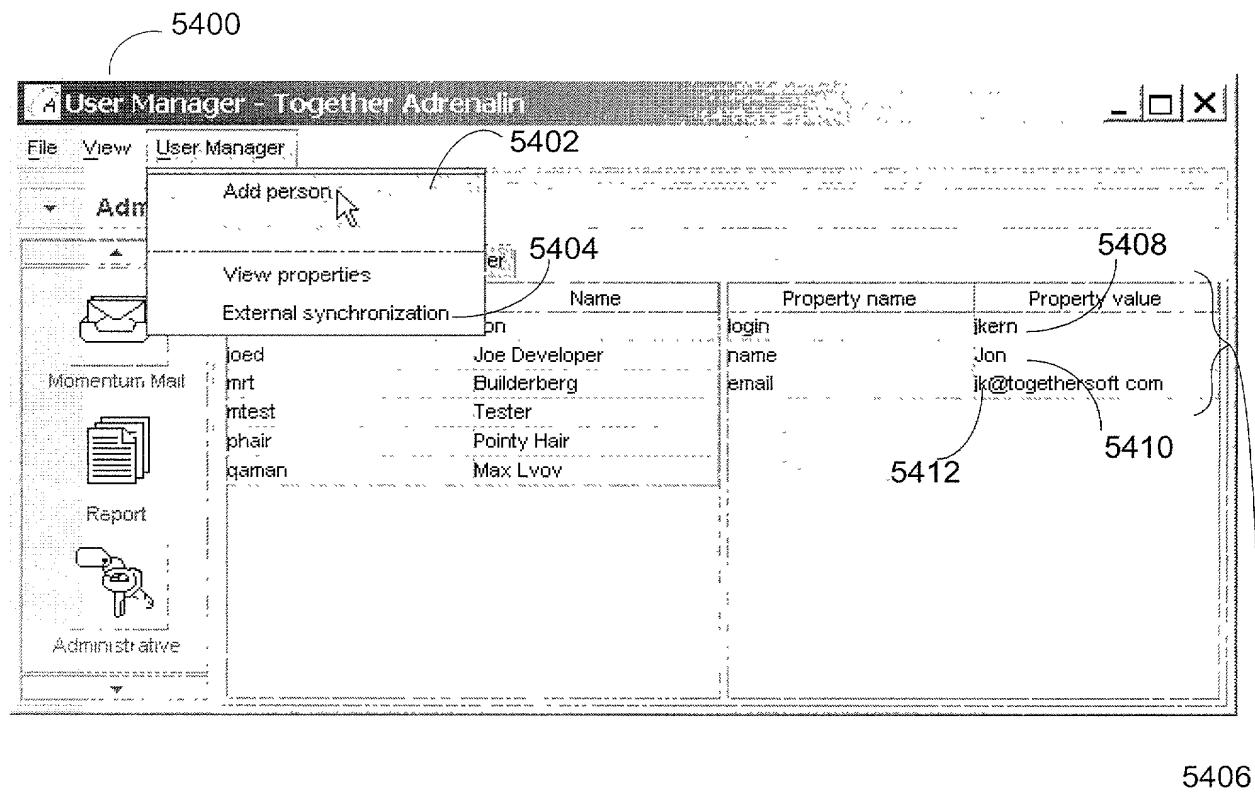


FIG. 55

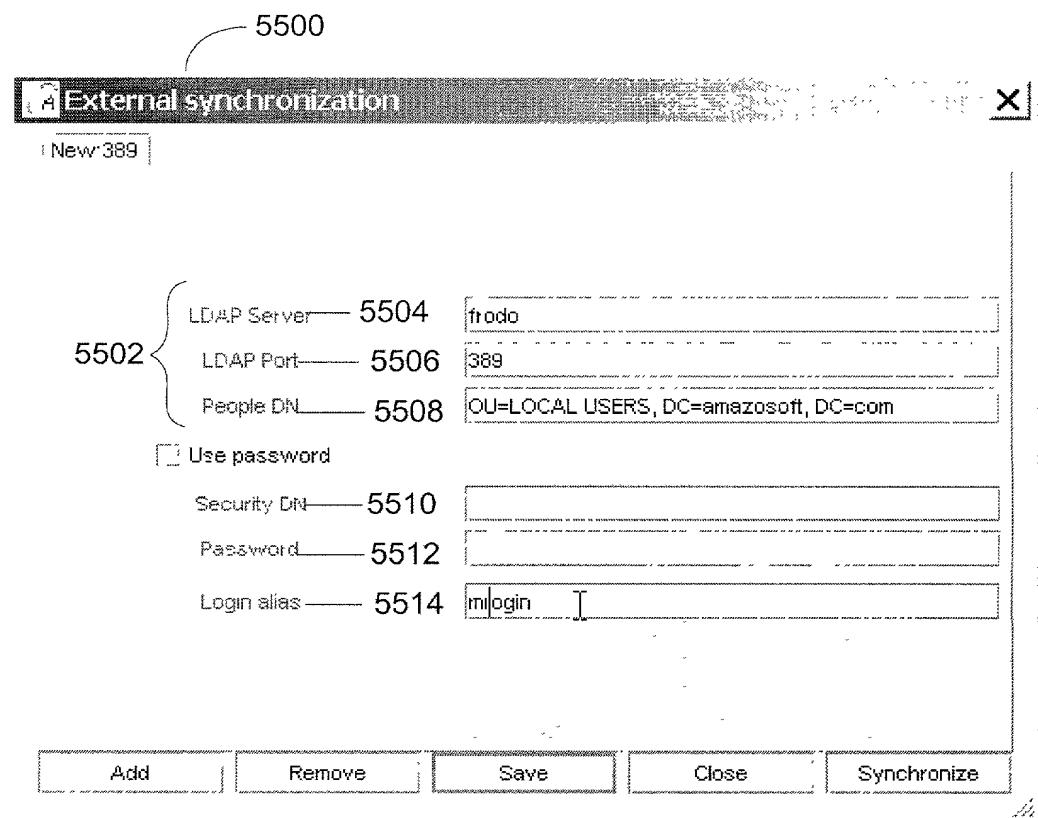
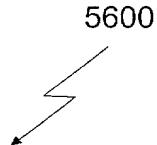


FIG. 56

5600
5610
5612



```
<?xml version="1.0" encoding="UTF-8" ?>
- <users>
  - <user>
    <id>PH</id>
    <name>Pointy Hair</name>
    <email>ph@company.com</email>
    <password>ZGV364==</password>
    url= "Software_Projects/Hello-World_App/Users_1.xml"
  </user>
  - <user>
    <id>MQ</id>
    <name>Mister Quality</name>
    <email>mq@company.com</email>
    <password>ZGV636==</password>
    url= "Software_Projects/Hello-World_App/Users_1.xml"
  </user>
  - <user>
    <id>MB</id>
    <name>Mister Build</name>
    <email>mb@company.com</email>
    <password>ZGV835==</password>
    url= "Software_Projects/Hello-World_App/Users_1.xml"
  </user>
  - <user>
    <id>MT</id>
    <name>Mister Tee</name>
    <email>mt@company.com</email>
    <password>ZGV470==</password>
    url= "Software_Projects/Hello-World_App/Users_1.xml"
  </user>
</users>
```

5602 {
5604 {
5606 {
5608 {
5610
5612

FIG. 57A

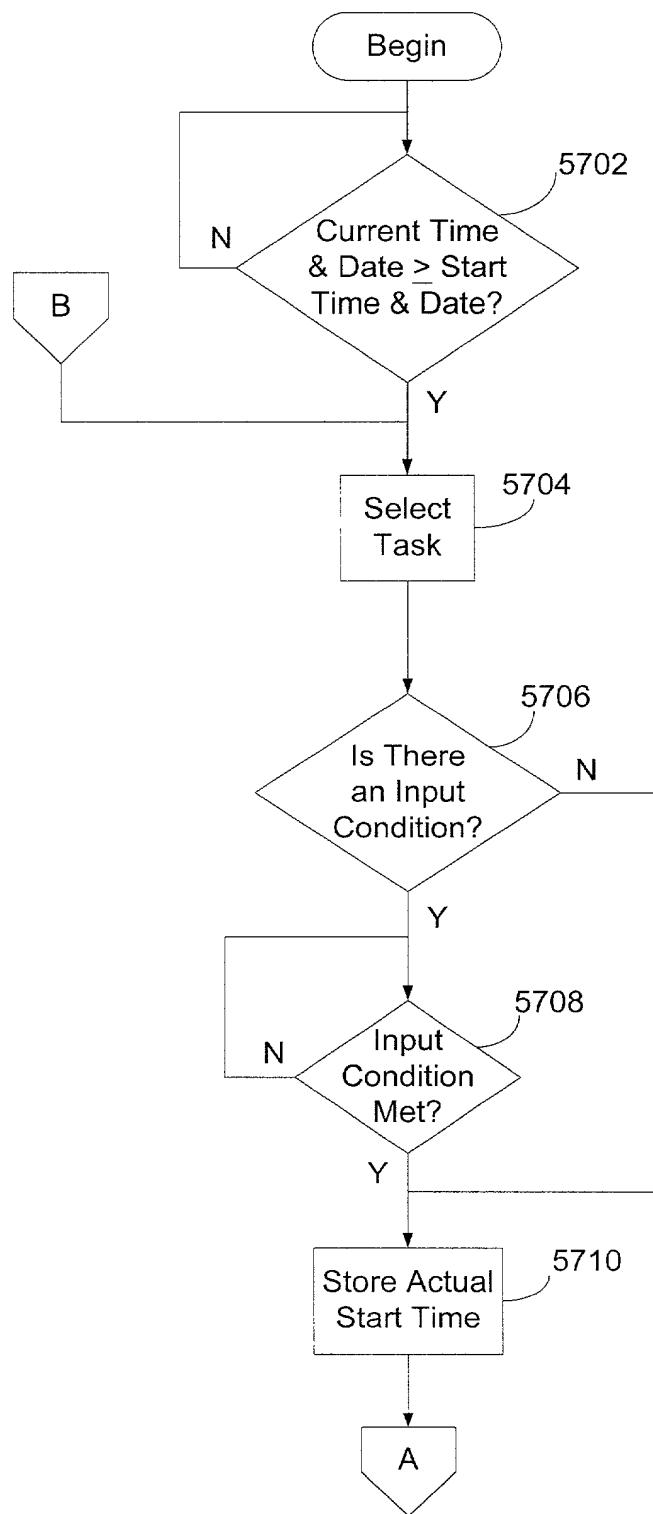


FIG. 57B

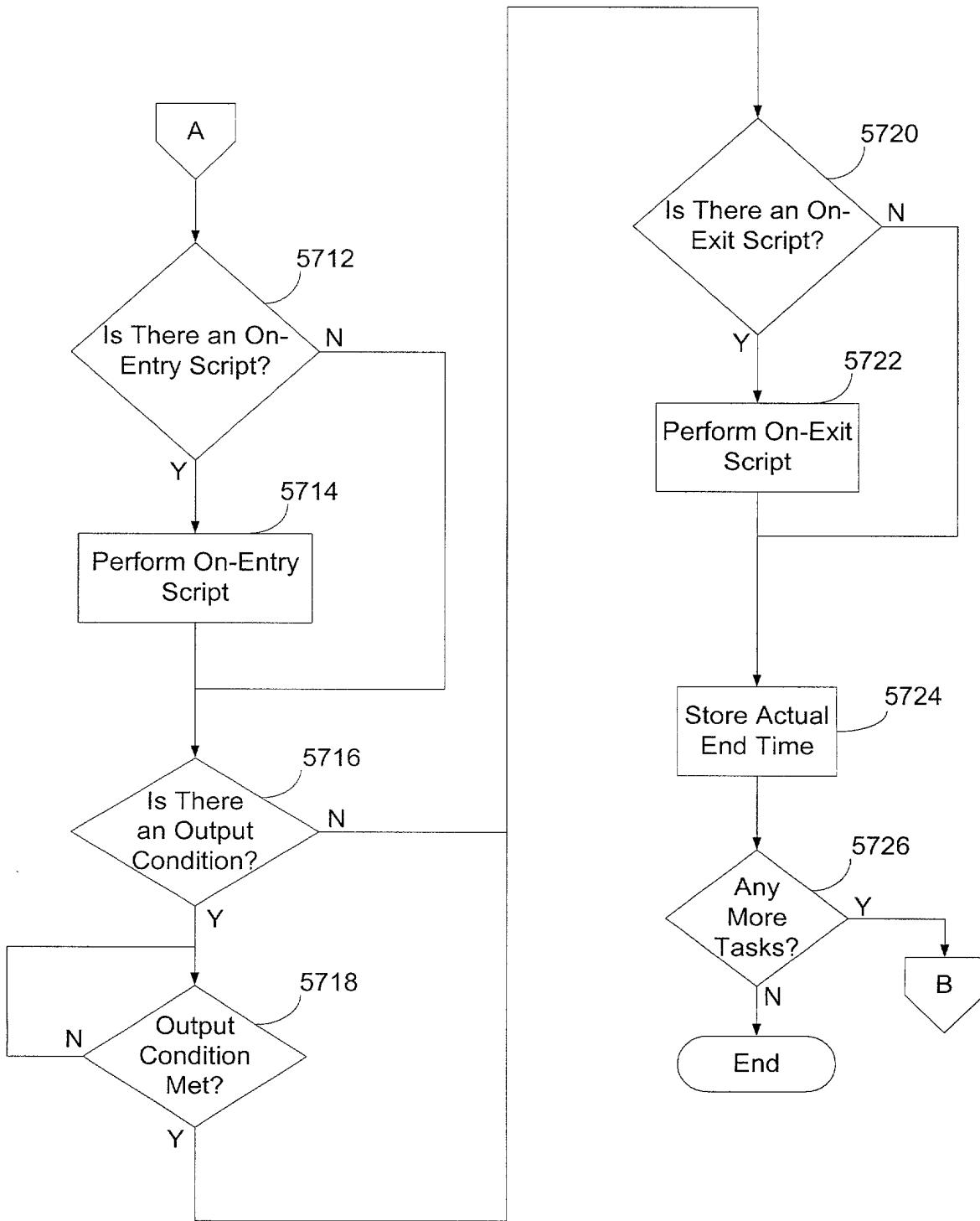


FIG. 58

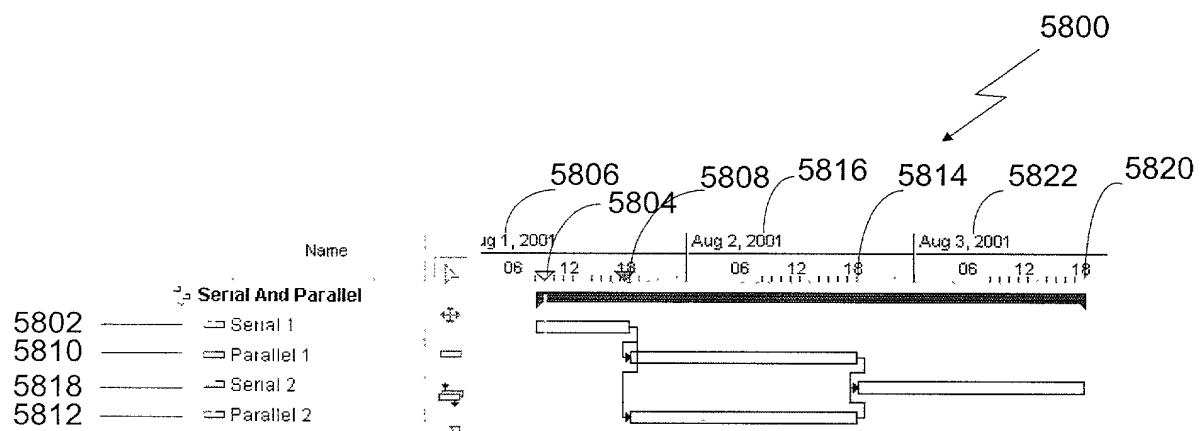


FIG. 59

5900

```
<?xml version="1.0" encoding="UTF-8" ?>
- <A:plan name="Serial_And_Parallel" userid="JK" xmlns:A="workflow">
  - <A:description>
    - <![CDATA[
      No Description
    ]]>
  </A:description>
  - <A:task activityID="10" caption="Serial 1">
    link="Sample_Project_Plans/Serial_And_Parallel/Task_2.xml" name="Task_2"
    owner="Worker"
    processURL="http://localhost:8080/webdav/ProcessGroup2/Process1.xml"
    type="general" userid="JK">
    <A:start>2001 8 1 8</A:start>
    <A:finish>2001 8 1 18</A:finish>
    <A:supertask name="Task_1" />
    <A:user>JK</A:user>
    <A:successor name="Task_3" />
    <A:successor name="Task_4" />
  </A:task>
  - <A:task activityID="1523" caption="Parallel 1">
    link="Sample_Project_Plans/Serial_And_Parallel/Task_3.xml" name="Task_3"
    owner="Worker"
    processURL="http://localhost:8080/webdav/ProcessGroup2/Process1.xml"
    type="general" userid="JK">
    <A:start>2001 8 1 18</A:start>
    <A:finish>2001 8 2 18</A:finish>
    <A:supertask name="Task_1" />
    <A:user>JK</A:user>
    <A:predecessor name="Task_2" />
    <A:successor name="Task_5" />
  </A:task>
  - <A:task activityID="1524" caption="Parallel 2">
    link="Sample_Project_Plans/Serial_And_Parallel/Task_4.xml" name="Task_4"
    owner="Worker"
    processURL="http://localhost:8080/webdav/ProcessGroup2/Process1.xml"
    type="general" userid="JK">
    <A:start>2001 8 1 18</A:start>
    <A:finish>2001 8 2 18</A:finish>
    <A:supertask name="Task_1" />
    <A:user>JK</A:user>
    <A:predecessor name="Task_2" />
    <A:successor name="Task_5" />
  </A:task>
  - <A:task activityID="1526" caption="Serial 2">
    link="Sample_Project_Plans/Serial_And_Parallel/Task_5.xml" name="Task_5"
    owner="Worker"
    processURL="http://localhost:8080/webdav/ProcessGroup2/Process1.xml"
    type="general" userid="JK">
    <A:start>2001 8 2 18</A:start>
    <A:finish>2001 8 3 18</A:finish>
    <A:supertask name="Task_1" />
    <A:user>JK</A:user>
    <A:predecessor name="Task_3" />
    <A:predecessor name="Task_4" />
  </A:task>
  - <A:task activityID="NONE" caption="Serial And Parallel">
    link="Sample_Project_Plans/Serial_And_Parallel/Task_1.xml" name="Task_1"
    processURL="http://localhost:8080/webdav/ProcessGroup2/Process1.xml"
    type="general" userid="JK">
    <A:start>2001 8 1 8</A:start>
    <A:finish>2001 8 3 18</A:finish>
    <A:user>JK</A:user>
    <A:subtask name="Task_2" />
```

FIG. 60

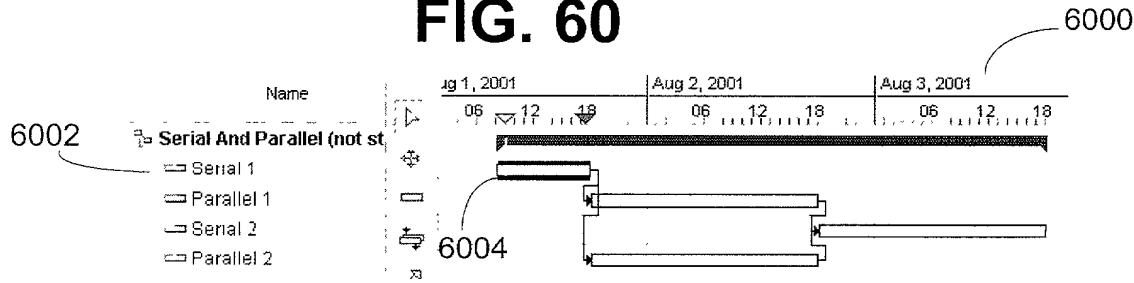


FIG. 61

```

<?xml version="1.0" encoding="UTF-8" ?>
- <A:FilePropertyMap xmlns:A="adrenalin:">
  - <A:factstart xmlns:A="workflow">2001 8 1 9</A:factstart>
  - <A:factfinish xmlns:A="workflow">2001 8 1 14</A:factfinish>
  - <A:ProjectTask xmlns:A="Serial 1" />
</A:FilePropertyMap>

```

FIG. 61 XML code showing factstart (2001 8 1 9), factfinish (2001 8 1 14), and a ProjectTask (Serial 1). References 6100, 6104, 6102, and 6106 are shown.

FIG. 62

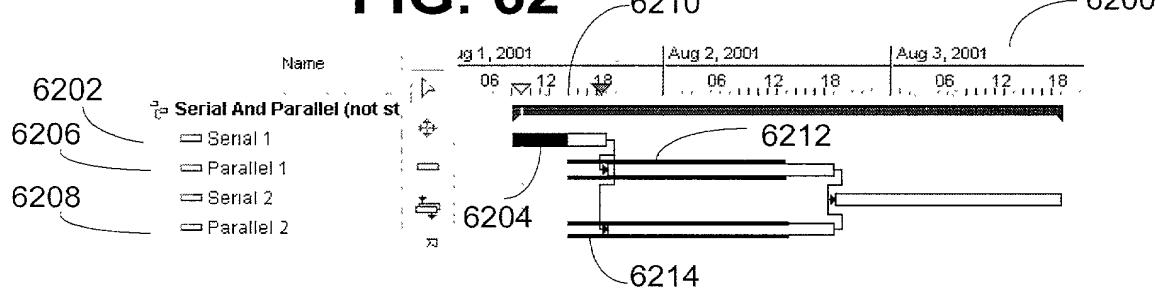


FIG. 63

```

<?xml version="1.0" encoding="UTF-8" ?>
- <A:FilePropertyMap xmlns:A="adrenalin:">
  - <A:factstart xmlns:A="workflow">2001 8 1 14</A:factstart>
  - <A:factfinish xmlns:A="workflow">2001 8 2 0</A:factfinish>
  - <A:ProjectTask xmlns:A="Parallel 1" />
  - <A:ProjectTask xmlns:A="Parallel 2" />
</A:FilePropertyMap>

```

FIG. 63 XML code showing factstart (2001 8 1 14), factfinish (2001 8 2 0), and two ProjectTasks (Parallel 1 and Parallel 2). References 6300, 6306, 6304, 6308, 6302, and 6302 are shown.

FIG. 64

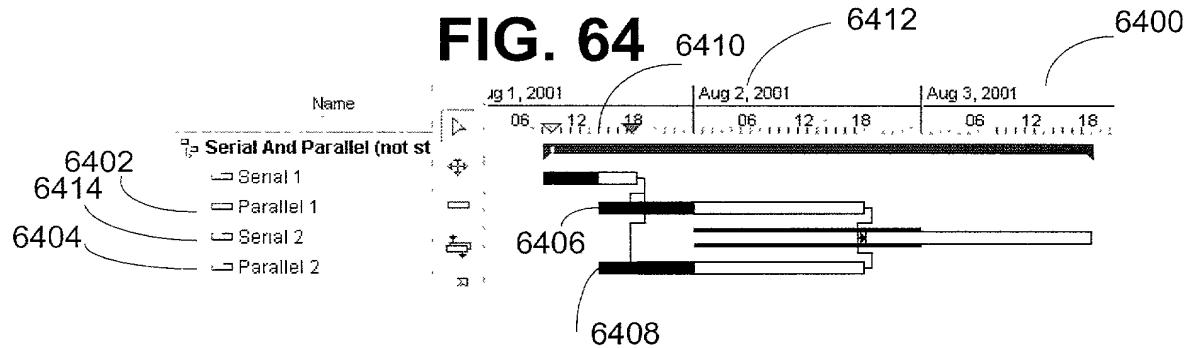


FIG. 65

```

<?xml version="1.0" encoding="UTF-8" ?>
- <A:FilePropertyMap xmlns:A="adrenalin:">
  <A:factstart xmlns:A="workflow">2001 8 2 0</A:factstart>
  <A:factfinish xmlns:A="workflow">2001 8 2 12</A:factfinish>
  <A:ProjectTask xmlns:A="Serial 2" />
</A:FilePropertyMap>

```

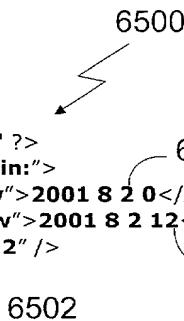
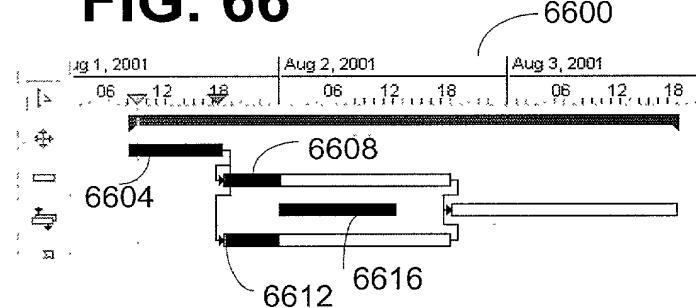
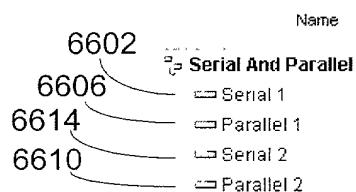
**FIG. 66**

FIG. 67A

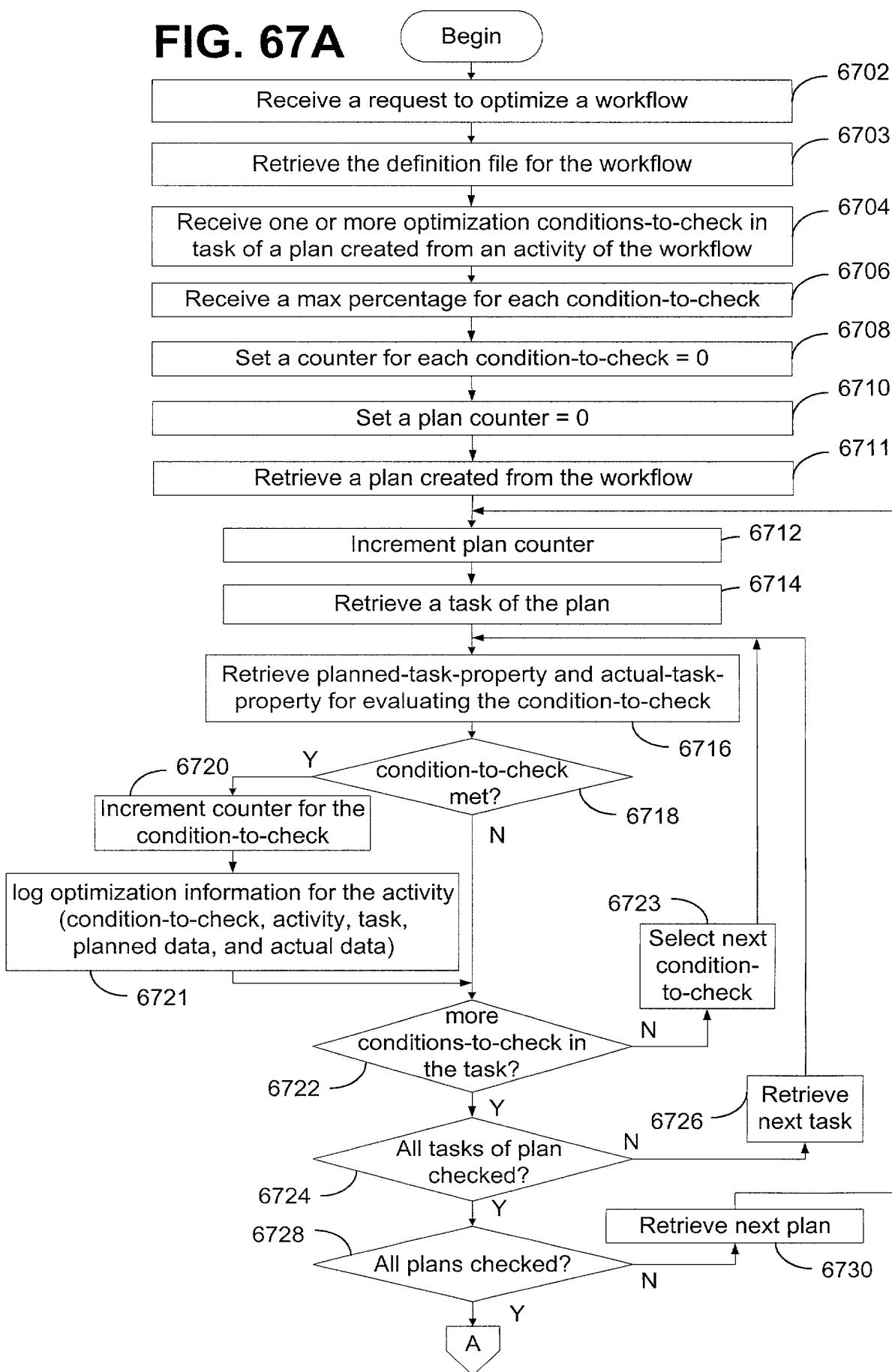


FIG. 67B

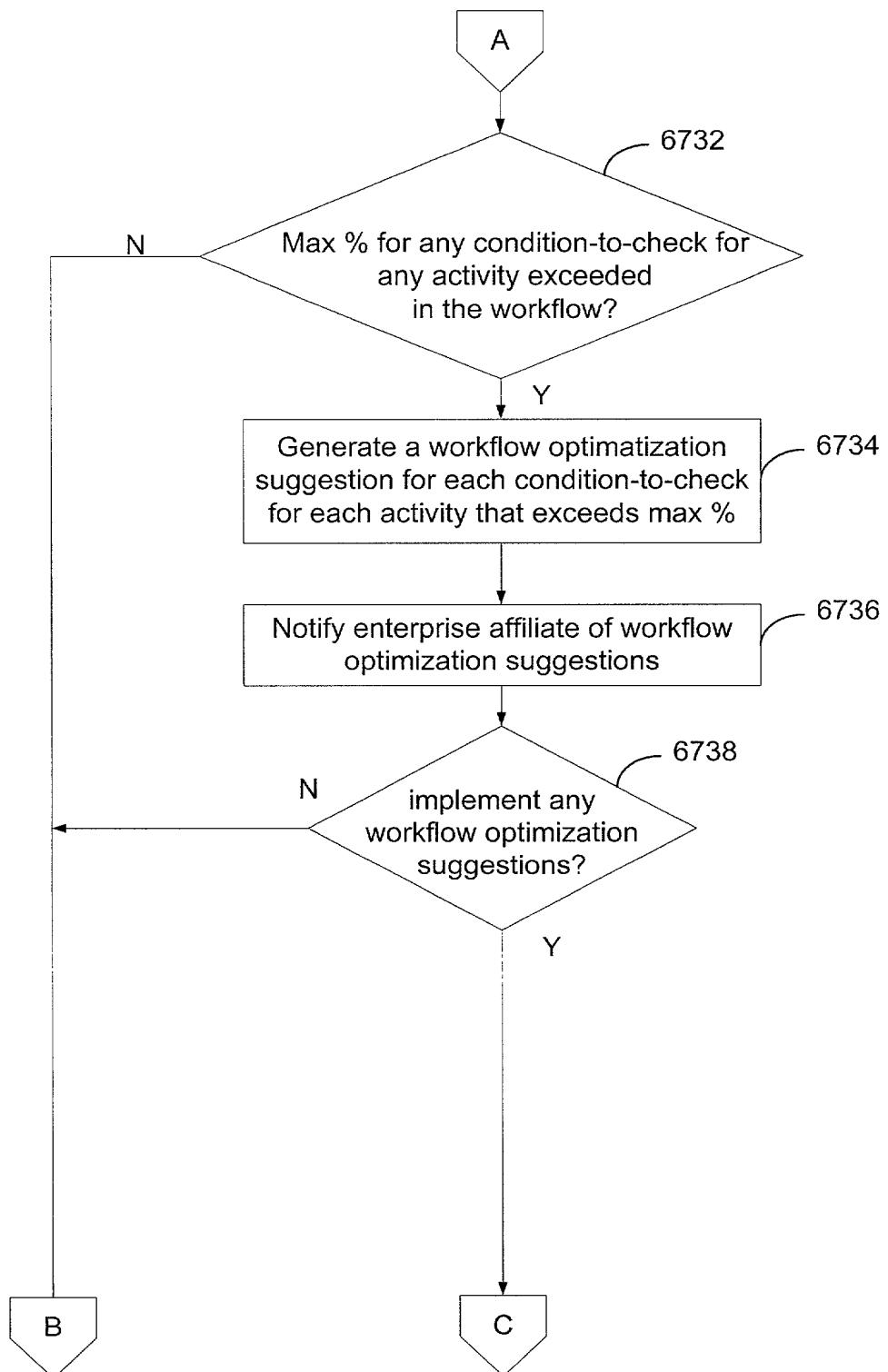


FIG. 67C

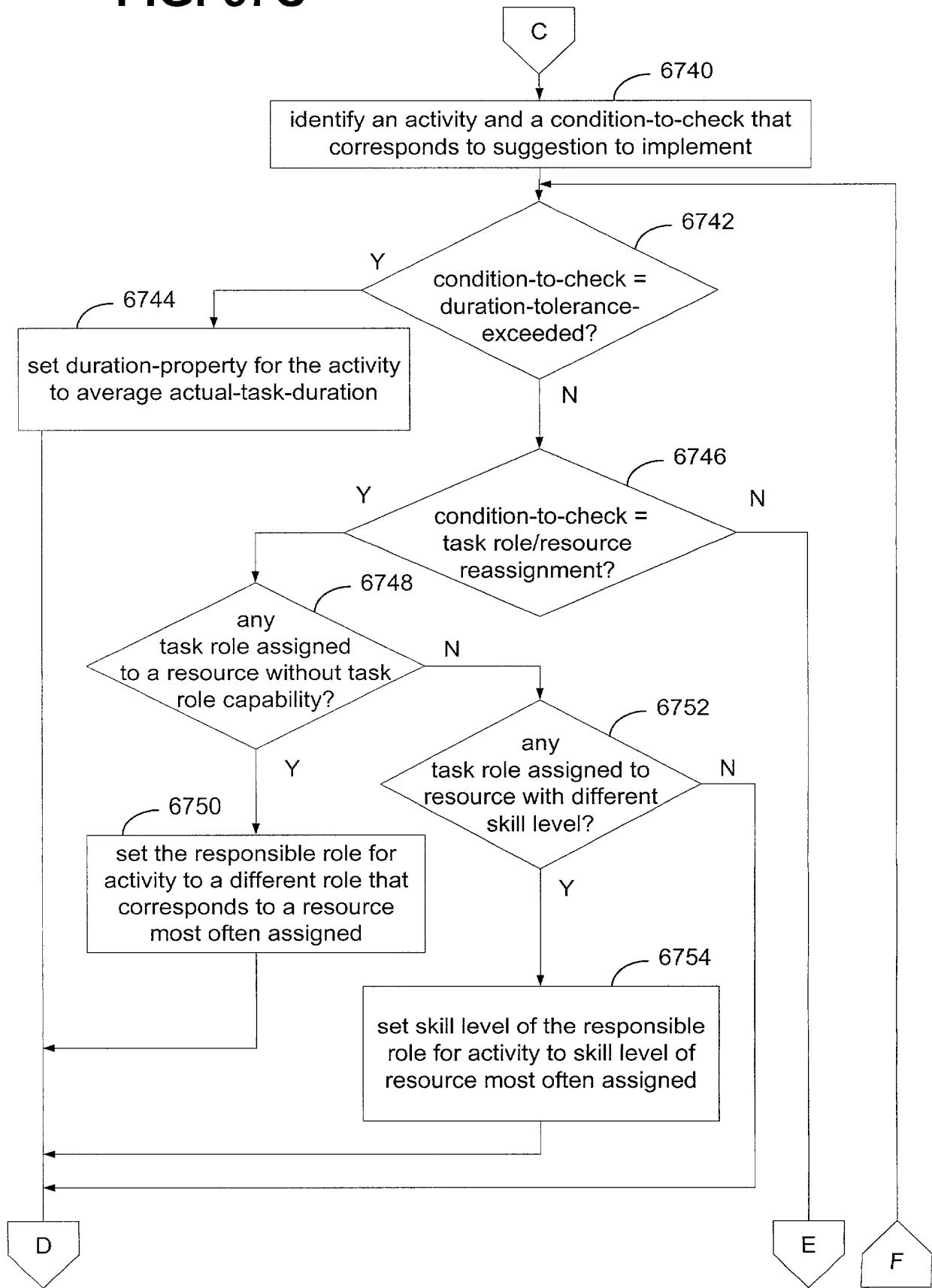


FIG. 67D

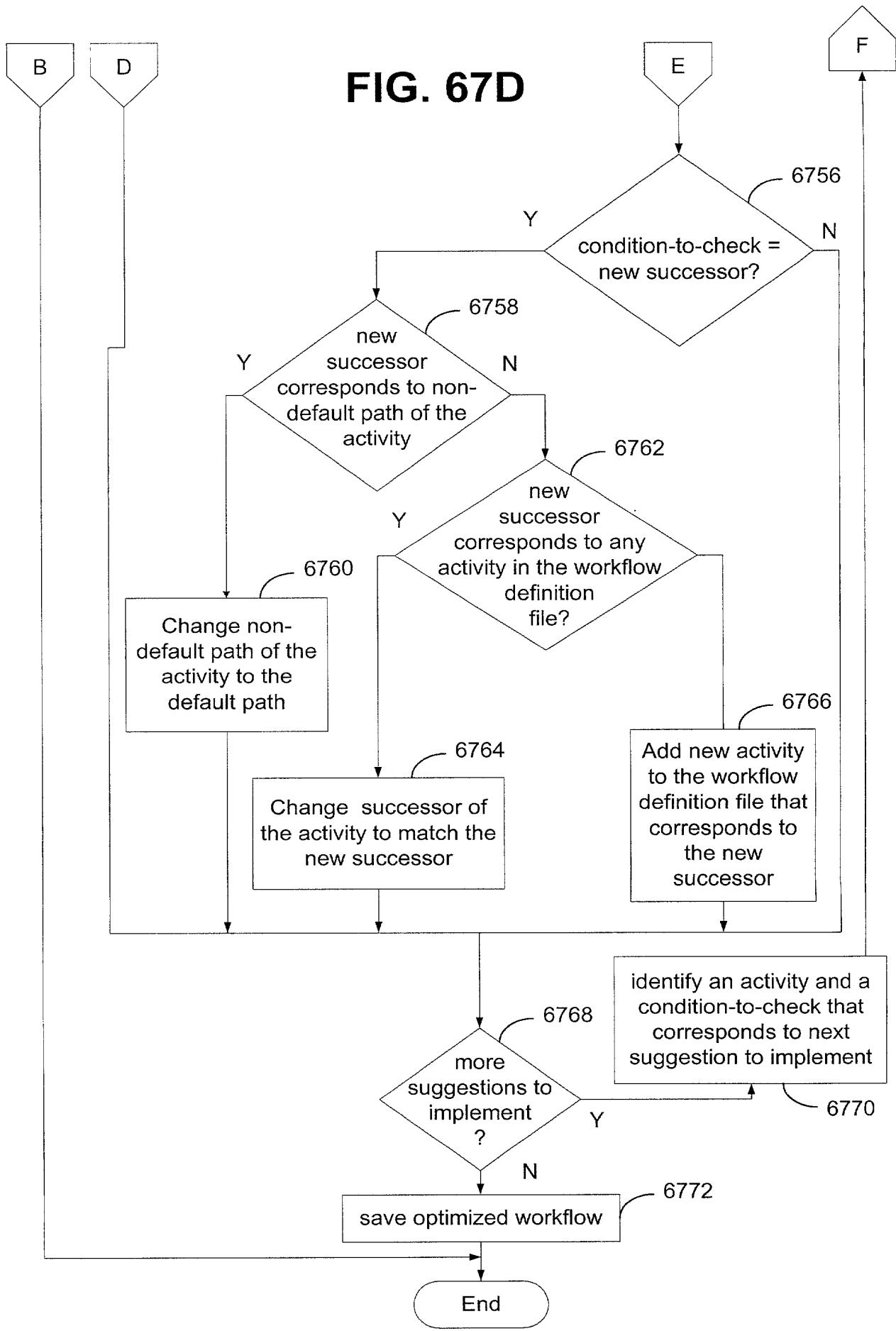


FIG. 68

6800 →

```

<?xml version="1.0" encoding="UTF-8" ?>
<process group="" name="Assembly Workflow">
  <description />
  <role name="Assembler" />
  <activity id="10" name="Get Parts" responsibleRole="Assembler" optimize="yes" minPlans="5" maxPercentage="10">
    <description />
    <defDuration units="units" value="1" tolerance="1" optimize="yes" minPlans="5" maxPercentage="10"/>
    <predecessors_id id="11" />
    <successors_id id="50" optimize="yes" minPlans="5" maxPercentage="5"/>
    <out_artifacts id="1527" />
  </activity>
  <activity id="51" name="Left" responsibleRole="Assembler">
    <description />
    <defDuration units="units" value="1" />
    <predecessors_id id="50" />
    <successors_id id="54" />
    <out_artifacts id="1529" />
  </activity>
  <activity id="54" name="Left Special" responsibleRole="Assembler">
    <description />
    <defDuration units="units" value="1" />
    <predecessors_id id="51" />
    <successors_id id="53" />
    <out_artifacts id="1531" />
  </activity>
  <activity id="52" name="Right" responsibleRole="Assembler">
    <description />
    <defDuration units="units" value="1" />
    <predecessors_id id="50" />
    <successors_id id="53" />
    <out_artifacts id="1533" />
  </activity>
  <activity id="53" name="Complete Assembly" responsibleRole="Assembler">
    <description />
    <defDuration units="units" value="1" />
    <predecessors_id id="54" />
    <predecessors_id id="52" />
    <successors_id id="12" />
    <out_artifacts id="1535" />
  </activity>
  <logic id="50" name="L Or Rt Handed?" responsibleRole="Assembler">
    <description />
    <script>
      - <![CDATA[
        approved()
      ]]>
    </script>
    <predecessors_id id="10" />
    <other_path_id id="52" />
    <other_path_id id="51" />
  </logic>
  <defPath_id id="52" optimize="yes" minPlans="5" maxPercentage="5"/>

```

6801 → 6802 → 6808 → 6846 → 6850 → 6842 → 6854 → 6828 → 6838 → 6830 → 6806 → 6812 → 6818 → 6804 → 6810 → 6816 → 6824 → 6826 → 6852 → 6844 → 6856 → 6832 → 6834 → 6836

⋮

⋮

FIG. 69

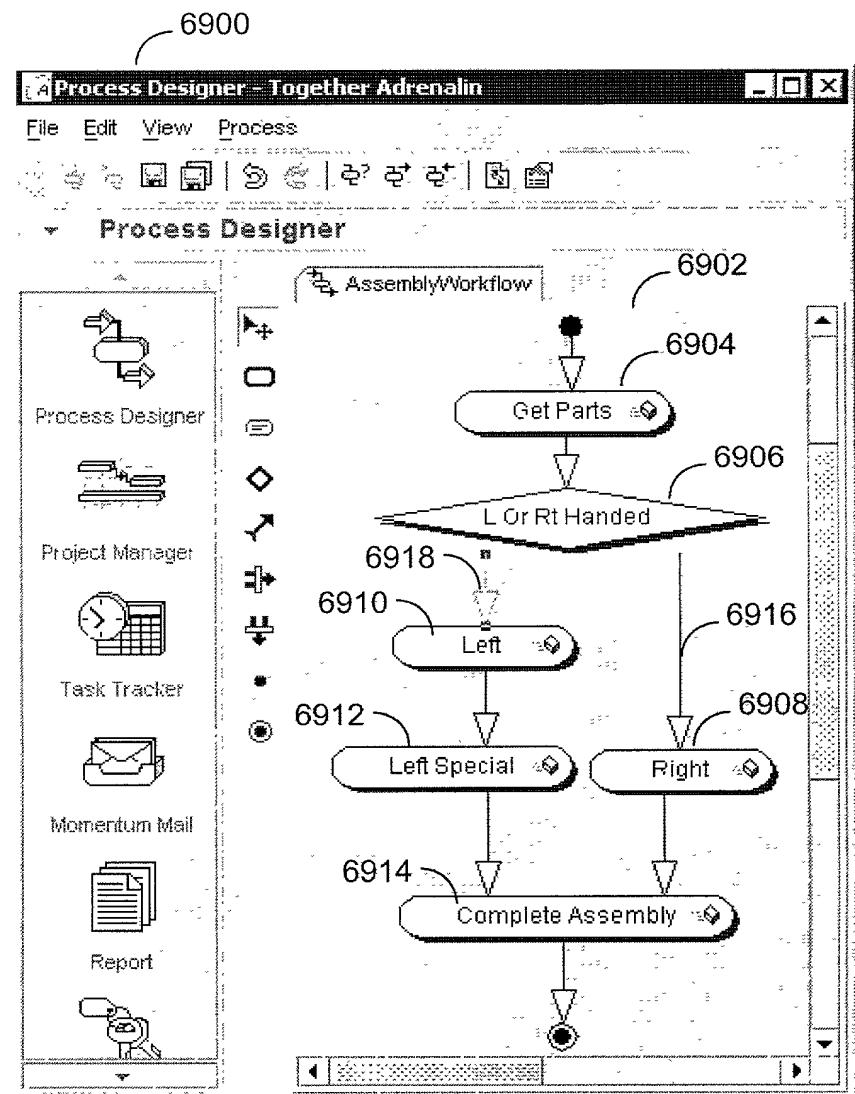


FIG. 70

Properties Property Optimization

7000

Name	Value	Optimization Condition-to-Check	Max %
Name	Get Parts		
Duration	1 7008		
Duration Tolerance	1 7010		
Duration Format	Hours <input checked="" type="checkbox"/>	Duration Tolerance Exceeded 7002	10 7024
Responsible Role	Assembler 7016 <input checked="" type="checkbox"/>	Role/Resource Reassignment 7002	10 7026
Default Successor	L Or Rt Handed? 7020 <input checked="" type="checkbox"/>	7006 New Successor 7028	5
⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮

FIG. 71A

```
<?xml version="1.0" encoding="UTF-8" ?>
- <A:plan name="Logic_Branch_Project" userid="JK" xmlns:A="workflow">
  <A:description>
    - <![CDATA[
      No Description
    ]]>
  </A:description>
  - <A:task activityID="10" caption="Get Parts"
    link="Sample_Project_Plans/Logic_Branch_Project/Task_2.xml"
    name="Task_2"
    owner="Assembler"
    processURL="http://localhost:8080/webdav/ProcessGroup2/AssemblyWorkflow.xml"
    type="general"
    userid="JK">
    <A:start>2001 8 2 8</A:start>
    <A:finish>2001 8 2 9</A:finish>
    <A:supertask name="Task_1" />
    <A:user>JK</A:user>
    <A:resource assignment="Auto"/>
    <A:successor name="Task_5" />
    <A:output name="Artifact_3" />
  </A:task>
  - <A:event caption="??Event_name" link="http://localhost:8080/webdav"
    method="PROPPATCH" name="Event_4" type="out">
    - <A:description>
      - <![CDATA[
        ??Event_desc
      ]]>
    </A:description>
  </A:event>
  </A:task>
- <A:task activityID="50" caption="L Or Rt Handed?"
  link="Sample_Project_Plans/Logic_Branch_Project/Task_5.xml" name="Task_5"
  owner="Assembler"
  processURL="http://localhost:8080/webdav/ProcessGroup2/AssemblyWorkflow.xml"
  type="logic" userid="JK">
  <A:start>2001 8 2 10</A:start>
  <A:finish>2001 8 2 10</A:finish>
  <A:supertask name="Task_1" />
  <A:user>JK</A:user>
  <A:predecessor name="Task_2" />
  <A:successor name="Task_7" />
  <A:output name="Artifact_6" />
</A:task>
```

FIG. 71B

```

7140
    - <A:task activityID="52" caption="Right"
      link="Sample_Project_Plans/Logic_Branch_Project/Task_7.xml" name="Task_7"
      owner="Assembler"
      processURL="http://localhost:8080/webdav/ProcessGroup2/AssemblyWorkflow.xml"
      type="general" userid="JK">
      <A:start>2001 8 2 10</A:start>
      <A:finish>2001 8 2 11</A:finish>
      <A:supertask name="Task_1" />
      <A:user>JK</A:user>
      <A:predecessor name="Task_5" />
      <A:successor name="Task_10" />
      <A:output name="Artifact_8" />
      - <A:event caption="??Event_name" link="http://localhost:8080/webdav"
        method="PROPPATCH" name="Event_9" type="out">
        - <A:description>
          - <![CDATA[
            ??Event_desc
          ]]>
        </A:description>
      </A:event>
    </A:task>
    - <A:task activityID="53" caption="Complete Assembly"
      link="Sample_Project_Plans/Logic_Branch_Project/Task_10.xml" name="Task_10"
      owner="Assembler"
      processURL="http://localhost:8080/webdav/ProcessGroup2/AssemblyWorkflow.xml"
      type="general" userid="JK">
      <A:start>2001 8 2 11</A:start>
      <A:finish>2001 8 3 11</A:finish>
      <A:supertask name="Task_1" />
      <A:user>JK</A:user>
      <A:predecessor name="Task_7" />
      <A:output name="Artifact_11" />
      - <A:event caption="??Event_name" link="http://localhost:8080/webdav"
        method="PROPPATCH" name="Event_12" type="out">
        - <A:description>
          - <![CDATA[
            ??Event_desc
          ]]>
        </A:description>
      </A:event>
    </A:task>
    - <A:task activityID="NONE" caption="Logic Branch Project"
      link="Sample_Project_Plans/Logic_Branch_Project/Task_1.xml" name="Task_1"
      processURL="http://localhost:8080/webdav/ProcessGroup2/AssemblyWorkflow.xml"
      type="general" userid="JK">
      <A:start>2001 8 2 8</A:start>
      <A:finish>2001 8 3 11</A:finish>
      <A:user>JK</A:user>
      <A:subtask name="Task_2" />
      <A:subtask name="Task_5" />
      <A:subtask name="Task_7" />
      <A:subtask name="Task_10" />
      - <A:param name="Document" type="string">
        - <A:value>
          - <![CDATA[
            document.txt
          ]]>
        </A:value>
      </A:param>
    </A:task>
    <A:artifact caption="Document is APPROVED" link="%Document%" name="Artifact_3"
      optimize="yes" state="APPROVED" />

```

FIG. 72

```
7202 7206 7204
<?xml version="1.0" encoding="UTF-8" ?>
<A:FilePropertyMap xmlns:A="adrenalin;">
  <A:factfinish xmlns:A="workflow">2001 8 2 9</A:factfinish>
  <A:factstart xmlns:A="workflow">2001 8 2 8</A:factstart>
  <A:ProjectTask xmlns:A="PROJECT" />
  <A:percent xmlns:A="workflow">100</A:percent>
  <A:state xmlns:A="workflow">ACTIVE</A:state>
</A:FilePropertyMap>
```

FIG. 73A

```

<?xml version="1.0" encoding="UTF-8" ?>
<A:plan name="Logic_Branch_Project" userid="JK" xmlns:A="workflow">
  - <A:description>
    - <![CDATA[
      No Description
    ]]>
  </A:description>
  - <A:task activityID="10" caption="Get Parts" 7308
    link="Sample_Project_Plans/Logic_Branch_Project/Task_2.xml"
    name="Task_2"
    owner="Assembler" 7323
    processURL="http://localhost:8080/webdav/ProcessGroup2/AssemblyWorkflow.xml"
    type="general" 7312
    userid="MG" 7325
    <A:start>2001 8 2 8</A:start>
    <A:finish>2001 8 2 10</A:finish>
  7322 <A:supertask name="Task_1" />
  7325 <A:user>MG</A:user>
  7324 <A:resource assignment="Manual"/> 7320
  7318 <A:successor name="Task_5" />
    <A:output name="Artifact_3" />
    - <A:event caption="??Event_name" link="http://localhost:8080/webdav"
      method="PROPPATCH" name="Event_4" type="out">
      <A:description>
        - <![CDATA[
          ??Event_desc
        ]]>
      </A:description>
    </A:event>
  </A:task>
  - <A:task activityID="50" caption="L Or Rt Handed?" 7330
    link="Sample_Project_Plans/Logic_Branch_Project/Task_5.xml" name="Task_5"
    owner="Assembler"
    processURL="http://localhost:8080/webdav/ProcessGroup2/AssemblyWorkflow.xml"
    type="logic" userid="JK"
    <A:start>2001 8 2 10</A:start>
    <A:finish>2001 8 2 10</A:finish>
    <A:supertask name="Task_1" />
    <A:user>JK</A:user>
    <A:predecessor name="Task_2" />
    <A:successor name="Task_16" />
  7332 <A:output name="Artifact_6" />
  </A:task>

```

FIG. 73B

7350

```
<A:task activityID="53" caption="Complete Assembly"
  link="Sample_Project_Plans/Logic_Branch_Project/Task_10.xml" name="Task_10"
  owner="Assembler"
  processURL="http://localhost:8080/webdav/ProcessGroup2/Process3.xml"
  type="general" userid="JK">
  <A:start>2001 8 2 16</A:start>
  <A:finish>2001 8 3 16</A:finish>
  <A:supertask name="Task_1" />
  <A:user>JK</A:user>
  <A:predecessor name="Task_19" />
  <A:output name="Artifact_11" />
  <A:output name="Artifact_22" />
  <A:event caption="??Event_name" link="http://localhost:8080/webdav"
    method="PROPPATCH" name="Event_15" type="out">
    <A:description>
      - <![CDATA[
        ??Event_desc
      ]]>
    </A:description>
  </A:event>
  <A:event caption="??Event_name" link="http://localhost:8080/webdav"
    method="PROPPATCH" name="Event_23" type="out">
    <A:description>
      - <![CDATA[
        ??Event_desc
      ]]>
    </A:description>
  </A:event>
</A:task>
<A:task activityID="NONE" caption="Logic Branch Project"
  link="Sample_Project_Plans/Logic_Branch_Project/Task_1.xml" name="Task_1"
  processURL="http://localhost:8080/webdav/ProcessGroup2/Process3.xml"
  type="general" userid="JK">
  <A:start>2001 8 2 8</A:start>
  <A:finish>2001 8 3 16</A:finish>
  <A:user>JK</A:user>
  <A:subtask name="Task_2" />
  <A:subtask name="Task_5" />
  <A:subtask name="Task_10" />
  <A:subtask name="Task_16" />
  <A:subtask name="Task_19" />
  <A:param name="Document" type="string">
    <A:value>
      - <![CDATA[
        document.txt
      ]]>
    </A:value>
  </A:param>
</A:task>
```



FIG. 73C

↑

7340 {

```

<A:task activityID="51" caption="Left"
  link="Sample_Project_Plans/Logic_Branch_Project/Task_16.xml" name="Task_16"
  owner="Assembler"
  processURL="http://localhost:8080/webdav/ProcessGroup2/Process3.xml"
  type="general" userid="JK">
  <A:start>2001 8 2 10</A:start>
  <A:finish>2001 8 2 11</A:finish>
  <A:supertask name="Task_1" />
  <A:user>JK</A:user>
  <A:predecessor name="Task_5" />
  <A:successor name="Task_19" />
  <A:output name="Artifact_17" />
  - <A:event caption="??Event_name" link="http://localhost:8080/webdav"
    method="PROPPATCH" name="Event_18" type="out">
    - <A:description>
      - <![CDATA[
        ??Event_desc
      ]]>
    </A:description>
  </A:event>
</A:task>
<A:task activityID="54" caption="Left Special"
  link="Sample_Project_Plans/Logic_Branch_Project/Task_19.xml" name="Task_19"
  owner="Assembler"
  processURL="http://localhost:8080/webdav/ProcessGroup2/Process3.xml"
  type="general" userid="JK">
  <A:start>2001 8 2 11</A:start>
  <A:finish>2001 8 2 16</A:finish>
  <A:supertask name="Task_1" />
  <A:user>JK</A:user>
  <A:predecessor name="Task_16" />
  <A:successor name="Task_10" />
  <A:output name="Artifact_20" />
  - <A:event caption="??Event_name" link="http://localhost:8080/webdav"
    method="PROPPATCH" name="Event_21" type="out">
    - <A:description>
      - <![CDATA[
        ??Event_desc
      ]]>
    </A:description>
  </A:event>
</A:task>
<A:artifact caption="Document is APPROVED" link="%Document%" name="Artifact_3"
  optimize="yes" state="APPROVED" />
<A:artifact caption="automatic_generated" name="Artifact_6" optimize="no">
  - <A:script>
    - <![CDATA[
      approved()
    ]]>
  </A:script>
</A:artifact>

```

7360 {

↓

FIG. 74

```
<?xml version="1.0" encoding="UTF-8" ?>
<A:FilePropertyMap xmlns:A="adrenalin:">
  -<A:factfinish xmlns:A="workflow">2001 8 3 12</A:factfinish> 7406
  -<A:factstart xmlns:A="workflow">2001 8 2 8</A:factstart> 7404
  7402 {<A:ProjectTask xmlns:A="PROJECT" />
  <A:percent xmlns:A="workflow">100</A:percent>
  <A:state xmlns:A="workflow">ACTIVE</A:state>
</A:FilePropertyMap>
```

FIG. 75



FIG. 76

The diagram illustrates the structure of an XML document, specifically an assembly workflow. The XML code is as follows:

```
<?xml version="1.0" encoding="UTF-8" ?>
<workflow roles = "" name = "Assembly Workflow">
  <role>
    <id>1</id> 7614
    <name>Assembler</name> 7612
    <capable resources>
      <userid = "JK"/>
      <userid = "MB"/> 7610
    <capable resources/>
    <skillref = "2" strength="5"/>
    <skillref = "3" strength="5"/>
  </role>
  <role>
    <id>2</id> 7614
    <name>Master Assembler</name>
    <capable resources>
      <userid = "MB"/> 7616
    <capable resources/>
    <skillref = "2" strength="7"/>
  </role>
  <role>
    <id>3</id> 7620
    <name>Gopher</name>
    <capable resources>
      <userid = "JK"/>
      <userid = "MG"/> 7618
    <capable resources/>
    <skillref = "1" strength="5"/>
  </role>
</workflow roles />
```

Annotations and grouping are as follows:

- Annotations: The text "7600" is at the top left, with an arrow pointing to the opening tag of the root element. The text "7604" is on the left side, aligned with the first opening tag of a `<role>` element. The text "7606" is on the left side, aligned with the second opening tag of a `<role>` element. The text "7608" is on the left side, aligned with the third opening tag of a `<role>` element.
- Grouping:
 - Group 1 (7604): Contains the first `<role>` element (id 1).
 - Group 2 (7606): Contains the second `<role>` element (id 2).
 - Group 3 (7608): Contains the third `<role>` element (id 3).
- Specific annotations:
 - Annotation 1: A bracket on the right side of the `<name>` tag for the first `<role>` (id 1) is labeled "7612".
 - Annotation 2: Brackets on the right side of the `<userid>` tags for the first `<role>` (id 1) are labeled "7610".
 - Annotation 3: A bracket on the right side of the `<name>` tag for the second `<role>` (id 2) is labeled "7616".
 - Annotation 4: Brackets on the right side of the `<userid>` tags for the second `<role>` (id 2) are labeled "7618".

FIG. 77

The diagram illustrates the structure of an XML document. The root element is <resources>. Inside <resources> is a <user> element with the following attributes and child elements:

- <id>**JK**</id>
- <name>**Jon Kern**</name>
- <email>**jk@togethersoft.com**</email>
- <password>**ZGVvbQ==**</password>
- <skillref = "1" strength="2"/>
- <skillref = "2" strength="5"/>
- <skillref = "3" strength="7"/>

Below this user node, there is a vertical dashed line, followed by another <user> node:

- <id>**MG**</id>
- <name>**Mister Gopher**</name>
- <email>**jk@togethersoft.com**</email>
- <password>**ZGVtbw==**</password>
- <skillref = "1" strength="7"/>

Below this second user node, there is another vertical dashed line, followed by a third <user> node:

- <id>**MB**</id>
- <name>**Mister Build**</name>
- <email>**jk@togethersoft.com**</email>
- <password>**ZGVtbw==**</password>
- <skillref = "2" strength="2"/>
- <skillref = "3" strength="5"/>
- <skillref = "4" strength="5"/>

Below the third user node, there is a final vertical dashed line, followed by a closing </user> tag:

</user>

Annotations are present in the diagram:

- A label **7700** with a black arrow points to the opening <resources> tag.
- A label **7702** with a curly brace groups the first user node.
- A label **7704** with a curly brace groups the second user node.
- A label **7706** with a curly brace groups the third user node.
- A label **7708** is placed next to the <id> tag of the second user node.
- A label **7710** is placed next to the <id> tag of the third user node.
- A label **7712** is placed next to the <skillref = "1" strength="7"/> tag of the second user node.

FIG. 78

```

<?xml version="1.0" encoding="UTF-8" ?>
- <process group="" name="Assembly Workflow">
  <description />
  <role name="Assembler" />
  <role name="Gopher" />
  <activity id="10" name="Get Parts" responsibleRole="Gopher" optimize="yes" minPlans="5" max-
    percentage="10">
    <description />
    <defduration units="units" value="4" tolerance="1" optimize="yes" minPlans="5" max-
      percentage="10"/>
    <predecessors_id id="11" />
    <successors_id id="50" optimize="yes" minPlans="5" maxPercentage="5"/>
    <out_artifacts id="1527" />
  </activity>
  <activity id="51" name="Left" responsibleRole="Assembler" >
    <description />
    <defduration units="units" value="1" />
    <predecessors_id id="50" />
    <successors_id id="54" />
    <out_artifacts id="1529" />
  </activity>
  <activity id="54" name="Left Special" responsibleRole="Assembler" >
    <description />
    <defduration units="units" value="1" />
    <predecessors_id id="51" />
    <successors_id id="53" />
    <out_artifacts id="1531" />
  </activity>
  <activity id="52" name="Right" responsibleRole="Assembler" >
    <description />
    <defduration units="units" value="1" />
    <predecessors_id id="50" />
    <successors_id id="53" />
    <out_artifacts id="1533" />
  </activity>
  <activity id="53" name="Complete Assembly" responsibleRole="Assembler" >
    <description />
    <defduration units="units" value="1" />
    <predecessors_id id="54" />
    <predecessors_id id="52" />
    <successors_id id="12" />
    <out_artifacts id="1535" />
  </activity>
  <logic id="50" name="L or Rt Handed?" responsibleRole="Assembler" >
    <description />
    <script>
      - <![CDATA[
        approved()
      ]]>
    </script>
    <predecessors_id id="10" />
    <other_path_id id="52" />
    <other_path_id id="51" />
    <defpath_id id="51" optimize="yes" minPlans="5" maxPercentage="5" />
  </logic>

```

Annotations and connections:

- Annotations: 7800, 7806, 7802, 7804, 7816, 7826, 7822, 7815, 7814, 7812.
- Connections: 7800 points to the root node. 7806 points to the 'Assembler' role. 7802 points to the 'Gopher' role. 7804 points to the 'Get Parts' activity. 7816 points to the 'Left' activity. 7826 points to the 'Left Special' activity. 7822 points to the 'Right' activity. 7815 points to the 'L or Rt Handed?' logic. 7814 points to the '52' predecessor of the logic. 7812 points to the '51' predecessor of the logic.

FIG. 79

The diagram illustrates the structure of an XML document for an Assembly Workflow. The XML code is annotated with numbers (7900, 7902, 7904, 7906, 7908, 7910) and arrows to highlight specific elements and attributes.

```
<?xml version="1.0" encoding="UTF-8" ?>
  <workflow roles = "" name = "Assembly Workflow">
    <role>
      <id>1</id>
      <name>Assembler</name>
      <capable resources>
        <userid = "JK"/>
        <userid = "MB"/>
        <userid = "MG"/>
      <capable resources/>
      <skillref = "1" strength="5"/>
      <skillref = "2" strength="5"/>
      <skillref = "3" strength="5"/>
    </role>
    <role>
      <id>2</id>
      <name>Master Assembler</name>
      <capable resources>
        <userid = "MB"/>
      <capable resources/>
      <skillref = "2" strength="7"/>
    </role>
    <role>
      <id>3</id>
      <name>Gopher</name>
      <capable resources>
        <userid = "JK"/>
        <userid = "MG"/>
      <capable resources/>
      <skillref = "1" strength="5"/>
    </role>
  </workflow roles />
```

- Annotation 7900: Points to the opening XML tag <?xml version="1.0" encoding="UTF-8" ?>.
- Annotation 7902: A brace on the left side of the first role element, spanning from the opening tag to the closing </role> tag.
- Annotation 7904: A brace on the left side of the skillref elements within the first role.
- Annotation 7906: A brace on the right side of the skillref elements, spanning from the first skillref to the third skillref.
- Annotation 7908: A brace on the left side of the second role element.
- Annotation 7910: A brace on the right side of the second role element, spanning from the second role's opening tag to its closing </role> tag.

FIG. 80

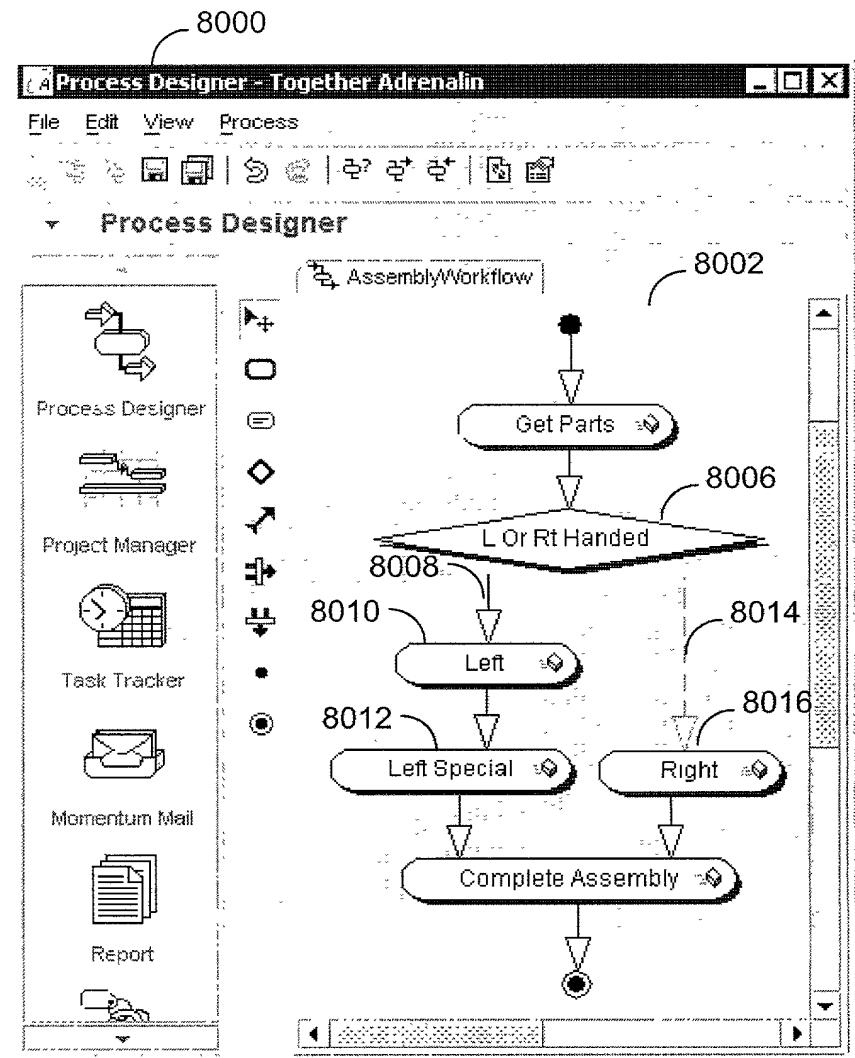


FIG. 81A

```
<?xml version="1.0" encoding="UTF-8" ?>
- <A:plan name="Logic_Branch_Project" userid="JK" xmlns:A="workflow">
  - <A:description>
    - <![CDATA[
      No Description
      ]]>
  </A:description>
  - <A:task activityID="10" caption="Get Parts"
    link="Sample_Project_Plans/Logic_Branch_Project/Task_2.xml"
    name="Task_2"
    owner="Assembler" 8123
    processURL="http://localhost:8080/webdav/ProcessGroup2/AssemblyWorkflow.xml"
    type="general" 8125
    userid="MG">
    <A:start>2001 8 2 8</A:start>
    <A:finish>2001 8 2 10</A:finish>
  8122 <A:supertask name="Task_1" />
  8124 <A:user>MG</A:user> 8120
  8118 <A:resource assignment="Manual"/>
  <A:successor name="Task_5" />
  <A:output name="Artifact_3" />
  - <A:event caption="??Event_name" link="http://localhost:8080/webdav"
    method="PROPPATCH" name="Event_4" type="out">
    <A:description>
      - <![CDATA[
        ??Event_desc
        ]]>
    </A:description>
  </A:event>
  </A:task>
  - <A:task activityID="50" caption="L Or Rt Handed?"
    link="Sample_Project_Plans/Logic_Branch_Project/Task_5.xml" name="Task_5"
    owner="Assembler"
    processURL="http://localhost:8080/webdav/ProcessGroup2/AssemblyWorkflow.xml"
    type="logic" userid="JK">
    <A:start>2001 8 2 10</A:start>
    <A:finish>2001 8 2 10</A:finish>
    <A:supertask name="Task_1" />
    <A:user>JK</A:user>
    <A:predecessor name="Task_2" />
    <A:successor name="Task_19" />
  8132 <A:output name="Artifact_6" />
  </A:task>
  8130
  8132
```

FIG. 81B

8150

```
<A:task activityID="53" caption="Complete Assembly"
  link="Sample_Project_Plans/Logic_Branch_Project/Task_10.xml" name="Task_10"
  owner="Assembler"
  processURL="http://localhost:8080/webdav/ProcessGroup2/Process3.xml"
  type="general" userid="JK">
  <A:start>2001 8 2 16</A:start>
  <A:finish>2001 8 3 16</A:finish>
  <A:supertask name="Task_1" />
  <A:user>JK</A:user>
  <A:predecessor name="Task_19" />
  <A:output name="Artifact_11" />
  <A:output name="Artifact_22" />
<_ <A:event caption="??Event_name" link="http://localhost:8080/webdav"
  method="PROPPATCH" name="Event_15" type="out">
  <A:description>
    - <![CDATA[
      ??Event_desc
    ]]>
  </A:description>
</A:event>
<_ <A:event caption="??Event_name" link="http://localhost:8080/webdav"
  method="PROPPATCH" name="Event_23" type="out">
  <A:description>
    - <![CDATA[
      ??Event_desc
    ]]>
  </A:description>
</A:event>
</A:task>
<A:task activityID="NONE" caption="Logic Branch Project"
  link="Sample_Project_Plans/Logic_Branch_Project/Task_1.xml" name="Task_1"
  processURL="http://localhost:8080/webdav/ProcessGroup2/Process3.xml"
  type="general" userid="JK">
  <A:start>2001 8 2 8</A:start>
  <A:finish>2001 8 3 16</A:finish>
  <A:user>JK</A:user>
  <A:subtask name="Task_2" />
  <A:subtask name="Task_5" />
  <A:subtask name="Task_10" />
  <A:subtask name="Task_16" />
  <A:subtask name="Task_19" />
<_ <A:param name="Document" type="string">
  <A:value>
    - <![CDATA[
      document txt
    ]]>
  </A:value>
</A:param>
</A:task>
```

FIG. 81C

8160

```
8162
- <A:task activityID="54" caption="Left Special"
  link="Sample_Project_Plans/Logic_Branch_Project/Task_19.xml" name="Task_19"
  owner="Assembler"
  processURL="http://localhost:8080/webdav/ProcessGroup2/Process3.xml"
  type="general" userid="JK">
  <A:start>2001 8 2 10</A:start>
  <A:finish>2001 8 2 16</A:finish>
  <A:supertask name="Task_1" />
  <A:user>JK</A:user>
  <A:predecessor name="Task_5" />
  <A:successor name="Task_10" />
  <A:output name="Artifact_20" />
- <A:event caption="??Event_name" link="http://localhost:8080/webdav"
  method="PROPPATCH" name="Event_21" type="out">
  - <A:description>
    - <![CDATA[
      ??Event_desc
    ]]>
  </A:description>
</A:event>
</A:task>
<A:artifact caption="Document is APPROVED" link="%Document%" name="Artifact_3"
  optimize="yes" state="APPROVED" />
- <A:artifact caption="automatic_generated" name="Artifact_6" optimize="no">
  - <A:script>
    - <![CDATA[
      approved()
    ]]>
  </A:script>
</A:artifact>
```



FIG. 82

```

8200
<?xml version="1.0" encoding="UTF-8" ?>
_ <process group="" name="Assembly Workflow">
  <description />
  <role name="Assembler" /> 8206
  <role name="Gopher" /> 8202
  <activity id="10" name="Get Parts" responsibleRole="Gopher" optimize="yes" minPlans="5" max-
    percentage="10">
    <description />
    <defduration units="units" value="4" tolerance="1" optimize="yes" minPlans="5" max-
      percentage="10"/>
    <predecessors_id id="11" />
    <successors_id id="50" optimize="yes" minPlans="5" maxPercentage="5"/>
    <out_artifacts id="1527" />
  </activity> 8222
  <activity id="54" name="Left Special" responsibleRole="Assembler">
    <description />
    <defduration units="units" value="1" />
    <predecessors_id id="50" /> 8226
    <successors_id id="53" />
    <out_artifacts id="1531" />
  </activity>
  <activity id="52" name="Right" responsibleRole="Assembler">
    <description />
    <defduration units="units" value="1" />
    <predecessors_id id="50" />
    <successors_id id="53" />
    <out_artifacts id="1533" />
  </activity>
  <activity id="53" name="Complete Assembly" responsibleRole="Assembler">
    <description />
    <defduration units="units" value="1" />
    <predecessors_id id="54" />
    <predecessors_id id="52" />
    <successors_id id="12" />
    <out_artifacts id="1535" />
  </activity>
</activity>

```

```

8228
<logic id="50" name="L or Rt Handed?" responsibleRole="Assembler">
  <description />
  <script>
    - <![CDATA[
      approved()
    ]]>
  </script>
  <predecessors_id id="10" /> 8215
  <other_path_id id="52" /> 8214
  <other_path_id id="54" />
  <defpath_id id="54" optimize="yes" minPlans="5" maxPercentage="5" />
</logic> 8212

```

FIG. 83

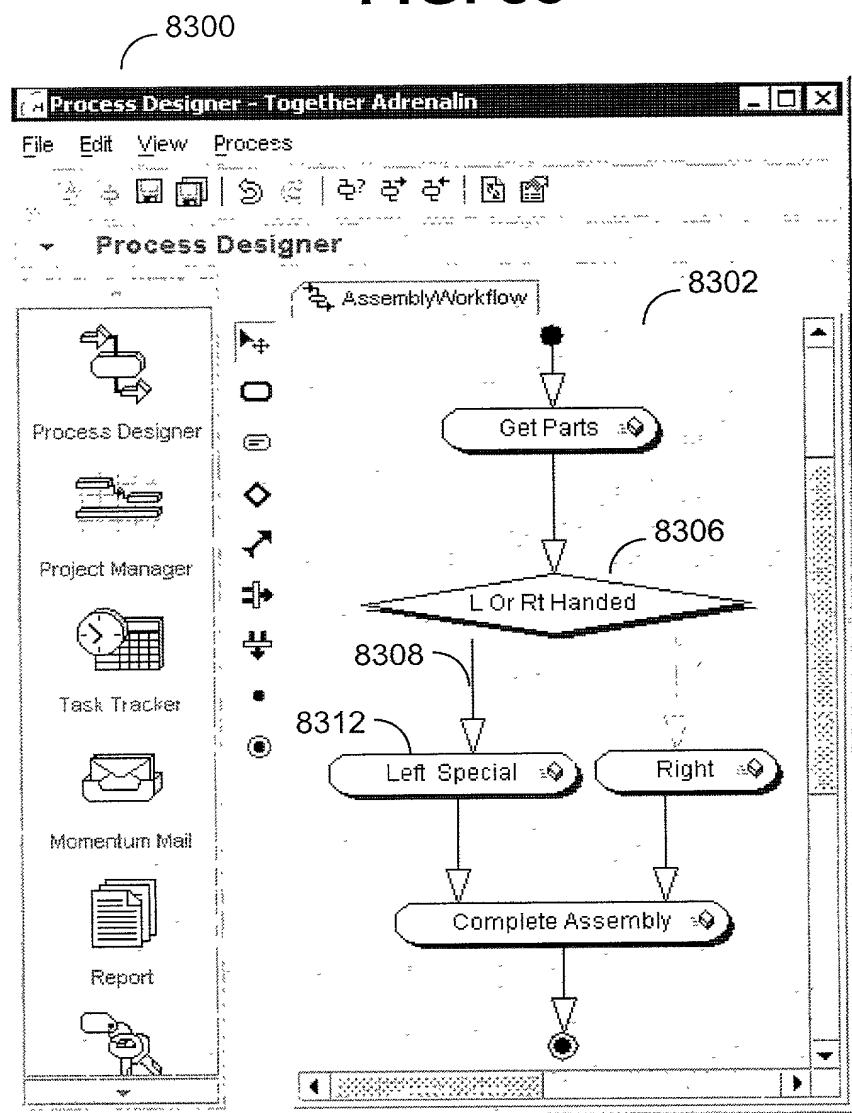


FIG. 84A

```

8400
<?xml version="1.0" encoding="UTF-8" ?>
- <A:plan name="Logic_Branch_Project" userid="JK" xmlns:A="workflow">
  - <A:description>
    - <![CDATA[
      No Description
    ]]>
  </A:description>
  - <A:task activityID="10" caption="Get Parts"
    link="Sample_Project_Plans/Logic_Branch_Project/Task_2.xml"
    name="Task_2"
    owner="Assembler"
    processURL="http://localhost:8080/webdav/ProcessGroup2/AssemblyWorkflow.xml"
    type="general"
    userid="MG">
    <A:start>2001 8 7 8</A:start>
    <A:finish>2001 8 7 10</A:finish>
    <A:supertask name="Task_1" />
    <A:user>MG</A:user>
  </A:task>
8410
8418
  - <A:resource assignment="Manual"/>
  - <A:successor name="Task_20" />
  - <A:output name="Artifact_3" />
  - <A:event caption="??Event_name" link="http://localhost:8080/webdav"
    method="PROPPATCH" name="Event_4" type="out">
    - <A:description>
      - <![CDATA[
        ??Event_desc
      ]]>
    </A:description>
  </A:event>
</A:task>
8420
  - <A:task activityID="50" caption="L Or Rt Handed?"
    link="Sample_Project_Plans/Logic_Branch_Project/Task_5.xml" name="Task_5"
    owner="Assembler"
    processURL="http://localhost:8080/webdav/ProcessGroup2/AssemblyWorkflow.xml"
    type="logic" userid="JK">
    <A:start>2001 8 7 11</A:start>
    <A:finish>2001 8 7 11</A:finish>
    <A:supertask name="Task_1" />
    <A:user>JK</A:user>
    <A:predecessor name="Task_20" />
    <A:successor name="Task_7" />
    <A:output name="Artifact_6" />
  </A:task>

```

FIG. 84B

8430

```
<A:task activityID="53" caption="Complete Assembly"
  link="Sample_Project_Plans/Logic_Branch_Project/Task_10.xml" name="Task_10"
  owner="Assembler"
  processURL="http://localhost:8080/webdav/ProcessGroup2/AssemblyWorkflow.xml"
  type="general" userid="JK">
  <A:start>2001 8 7 13</A:start>
  <A:finish>2001 8 7 14</A:finish>
  <A:supertask name="Task_1" />
  <A:user>JK</A:user>
  <A:predecessor name="Task_19" />
  <A:output name="Artifact_11" />
  <A:output name="Artifact_22" />
<A:event caption="??Event_name" link="http://localhost:8080/webdav"
  method="PROPPATCH" name="Event_15" type="out">
  <A:description>
    - <![CDATA[
      ??Event_desc
    ]]>
  </A:description>
</A:event>
<A:event caption="??Event_name" link="http://localhost:8080/webdav"
  method="PROPPATCH" name="Event_23" type="out">
  <A:description>
    - <![CDATA[
      ??Event_desc
    ]]>
  </A:description>
</A:event>
</A:task>
<A:task activityID="NONE" caption="Logic Branch Project"
  link="Sample_Project_Plans/Logic_Branch_Project/Task_1.xml" name="Task_1"
  processURL="http://localhost:8080/webdav/ProcessGroup2/AssemblyWorkflow.xml"
  type="general" userid="JK">
  <A:start>2001 8 7 8</A:start>
  <A:finish>2001 8 7 14</A:finish>
  <A:user>JK</A:user>
  <A:subtask name="Task_2" />
  <A:subtask name="Task_20" />
  <A:subtask name="Task_5" />
  <A:subtask name="Task_10" />
  <A:subtask name="Task_16" />
  <A:subtask name="Task_19" />
  <A:param name="Document" type="string">
    <A:value>
      - <![CDATA[
        document.txt
      ]]>
    </A:value>
  </A:param>
</A:task>
```

8440

FIG. 84C

8450

```
<A:task activityID="51" caption="Left"
  link="Sample_Project_Plans/Logic_Branch_Project/Task_16.xml" name="Task_16"
  owner="Assembler"
  processURL="http://localhost:8080/webdav/ProcessGroup2/AssemblyWorkflow.xml"
  type="general" userid="JK">
  <A:start>2001 8 7 11</A:start>
  <A:finish>2001 8 7 12</A:finish>
  <A:supertask name="Task_1" />
  <A:user>JK</A:user>
  <A:predecessor name="Task_5" />
  <A:successor name="Task_19" />
  <A:output name="Artifact_17" />
  <A:event caption="??Event_name" link="http://localhost:8080/webdav"
    method="PROPPATCH" name="Event_18" type="out">
    <A:description>
      - <![CDATA[
        ??Event_desc
      ]]>
    </A:description>
  </A:event>
</A:task>
```

8460

```
<A:task activityID="54" caption="Left Special"
  link="Sample_Project_Plans/Logic_Branch_Project/Task_19.xml" name="Task_19"
  owner="Assembler"
  processURL="http://localhost:8080/webdav/ProcessGroup2/AssemblyWorkflow.xml"
  type="general" userid="JK">
  <A:start>2001 8 7 12</A:start>
  <A:finish>2001 8 7 13</A:finish>
  <A:supertask name="Task_1" />
  <A:user>JK</A:user>
  <A:predecessor name="Task_16" />
  <A:successor name="Task_10" />
  <A:output name="Artifact_20" />
  <A:event caption="??Event_name" link="http://localhost:8080/webdav"
    method="PROPPATCH" name="Event_21" type="out">
    <A:description>
      - <![CDATA[
        ??Event_desc
      ]]>
    </A:description>
  </A:event>
</A:task>
```

8470

```
<A:task caption="Get Fasteners"
  link="Sample_Project_Plans/Logic_Branch_Project/Task_20.xml" name="Task_20"
  owner="Assembler"
  type="general" userid="JK">
  <A:start>2001 8 7 10</A:start>
  <A:finish>2001 8 7 11</A:finish>
  <A:supertask name="Task_1" />
  <A:user>JK</A:user>
  <A:predecessor name="Task_2" />
  <A:successor name="Task_5" />
  <A:output name="Artifact_22" />
  <A:event caption="??Event_name" link="http://localhost:8080/webdav"
    method="PROPPATCH" name="Event_23" type="out">
    <A:description>
      - <![CDATA[
        ??Event_desc
      ]]>
    </A:description>
  </A:event>
```

8472

FIG. 85

```

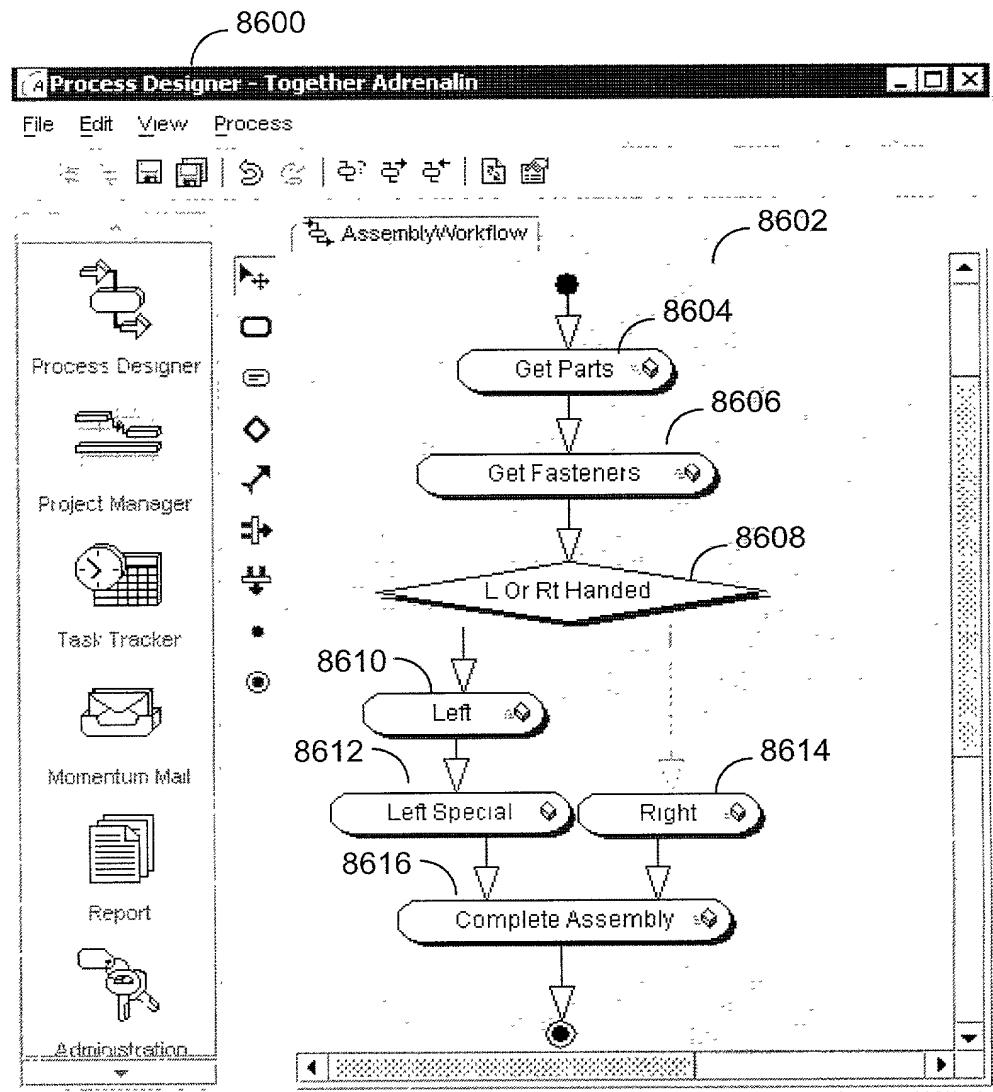
<?xml version="1.0" encoding="UTF-8" ?>
<process group="" name="Assembly Workflow">
    <description />
    <role name="Assembler" />
    <activity id="10" name="Get Parts" responsibleRole="Assembler" optimize="yes" minplans="5" max-
        percentage="10">
        <description />
        <defduration units="units" value="1" tolerance="1" optimize="yes" minplans="5" max-
            percentage="10"/>
        <predecessors_id id="11" />
        <successors_id id="55" optimize="yes" minplans="5" max-percentage="5"/>
        <out_artifacts id="1527" />
    </activity>
    <activity id="51" name="Left" responsibleRole="Assembler" >
        <description />
        <defduration units="units" value="1" />
        <predecessors_id id="50" />
        <successors_id id="54" />
        <out_artifacts id="1529" />
    </activity>
    <activity id="54" name="Left Special" responsibleRole="Assembler" >
        <description />
        <defduration units="units" value="1" />
        <predecessors_id id="51" />
        <successors_id id="53" />
        <out_artifacts id="1531" />
    </activity>
    <activity id="52" name="Right" responsibleRole="Assembler" >
        <description />
        <defduration units="units" value="1" />
        <predecessors_id id="50" />
        <successors_id id="53" />
        <out_artifacts id="1533" />
    </activity>
    <activity id="53" name="Complete Assembly" responsibleRole="Assembler" >
        <description />
        <defduration units="units" value="1" />
        <predecessors_id id="54" />
        <predecessors_id id="52" />
        <successors_id id="12" />
        <out_artifacts id="1535" />
    </activity>
    <activity id="55" name="Get Fasteners" responsibleRole="Assembler" >
        <description />
        <defduration units="units" value="1" />
        <predecessors_id id="10" />
        <successors_id id="50" />
        <out_artifacts id="1536" />
    </activity>
    <logic id="50" name="L Or Rt Handed?" responsibleRole="Assembler" >
        <description />
        <script>
            - <![CDATA[
                approved()
            ]]>
        </script>
        <predecessors_id id="55" />
        <other_path_id id="52" />
        <other_path_id id="51" />
        <defpath_id id="52" />
    </logic>

```

Annotations and connections:

- Annotation 8500: A bracket on the left side of the XML structure, spanning from activity 8501 to logic 8560, with an arrow pointing to the start of the XML.
- Annotation 8501: A bracket on the left side of the XML structure, spanning from activity 8501 to logic 8560, with an arrow pointing to the start of the XML.
- Annotation 8502: A bracket on the left side of the XML structure, spanning from activity 8502 to logic 8560, with an arrow pointing to the start of the XML.
- Annotation 8510: A bracket on the left side of the XML structure, spanning from activity 8510 to logic 8560, with an arrow pointing to the start of the XML.
- Annotation 8520: A bracket on the left side of the XML structure, spanning from activity 8520 to logic 8560, with an arrow pointing to the start of the XML.
- Annotation 8530: A bracket on the left side of the XML structure, spanning from activity 8530 to logic 8560, with an arrow pointing to the start of the XML.
- Annotation 8540: A bracket on the left side of the XML structure, spanning from activity 8540 to logic 8560, with an arrow pointing to the start of the XML.
- Annotation 8550: A bracket on the left side of the XML structure, spanning from activity 8550 to logic 8560, with an arrow pointing to the start of the XML.
- Annotation 8554: A bracket on the right side of the XML structure, spanning from activity 8554 to logic 8560, with an arrow pointing to the start of the XML.
- Annotation 8556: A bracket on the right side of the XML structure, spanning from activity 8556 to logic 8560, with an arrow pointing to the start of the XML.
- Annotation 8562: A bracket on the right side of the XML structure, spanning from activity 8562 to logic 8560, with an arrow pointing to the start of the XML.
- Annotation 8560: A bracket on the left side of the XML structure, spanning from activity 8560 to logic 8560, with an arrow pointing to the start of the XML.

FIG. 86



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